

LLNL Livermore Site Second Quarter 2009 Self-Monitoring Report

The following is the second quarter 2009 self-monitoring data for the treatment facilities and Lake Haussmann at the Lawrence Livermore National Laboratory (LLNL) Livermore Site.

In agreement with the newly established Federal Facility Agreement (FFA) Remedial Action Implementation Plan (RAIP) the following treatment facilities were restarted during the quarter to meet the June 30, 2009 FFA milestones: TFC East, TFD, TFD South, TFE Southeast, TF406 Northwest, TF5475-2, and VTF511. In addition, the following facilities continued to operate during the second quarter 2009: TFA, TFC-SE, TFE-HS, VTF406-HS, TFA East, TFB, TFC, TFD East, TFD Southeast, TFD Southshore, TFD West, TFE Northwest, TFE Southwest, TFE West, TFG-1, and TF406. TFA West was shutdown in January 2008 after a year-long treatability test and is operational only during monthly sampling events.

The volumes of ground water and soil vapor treated and volatile organic compound (VOC) mass removed during the second quarter of 2009 are presented in Tables 1 and 2, respectively. An historical summary of VOC volume and mass removed are presented in Tables 3 and 4, respectively.

Attachment A presents ground water treatment facility and extraction well (ground water and soil vapor) VOC, chromium, bioassay, turbidity and chloride analyses (Tables A-1 through A-5). During the second quarter of 2009, all effluent sample analyses were within acceptable discharge limits. An addendum presenting analytical results from extraction wells associated with treatment facilities that were restarted during this reporting period and nearby monitor wells is included at the end of Attachment A.

Self-monitoring reports for all treatment facilities are presented in Attachment B. Monthly volumes of ground water extracted are shown in Attachment B; however, instantaneous flow rates are not shown for wells that are now only used for sampling and are not continuously pumped. The monthly volume shown for these wells is the quantity of water evacuated for sampling purposes. Monitoring data for Lake Haussmann are presented in Attachment C.

A well location map showing wells and treatment facilities, and ground water elevation contour maps showing hydraulic capture zones for hydrostratigraphic units (HSUs) 1B, 2, 3A, 3B, 4, and 5, are presented in Attachment D. There were no new monitoring wells installed during this reporting period. The contour maps for the individual HSUs are based on data mostly collected during April 2009, prior to the restart of TFC East, TFD, TFD South, TFE Southeast, TF406 Northwest, TF5475-2, and VTF511.

This work performed under the auspices of the U.S. Department of Energy by Lawrence Livermore National Laboratory under Contract DE-AC52-07NA27344.

Table 1. Volumes of ground water and soil vapor extracted and treated at the Livermore Site, April through June 2009.

Treatment Area^a	Month	Volume of ground water extracted (Kgal)^b	Volume of vapor extracted (Kft³)^b
TFA	April	8,529	-
	May	7,272	-
	June	6,631	-
TFB	April	2,235	-
	May	2,316	-
	June	2,688	-
TFC	April	3,503	-
	May	3,732	-
	June	4,493	-
TFD	April	2,256	0
	May	1,686	0
	June	3,394	0
TFE	April	1,637	0
	May	1,667	0
	June	2,014	0
TFG	April	384	-
	May	304	-
	June	371	-
TFH	April	603	1,966
	May	569	1,580
	June	1,036	2,199
TOTAL^c		57,320	5,745

^a Totals include ground water and soil vapor extracted from the following facilities:

TFA area: TFA, TFA-E, TFA-W

TFB area: TFB

TFC area: TFC, TFC-E, TFC-SE

TFD area: TFD, TFD-E, TFD-HPD, TFD-S, TFD-SE, TFD-SS, TFD-W, VTFD-ETCS, VTFD-HPD, VTFD-HS

TFE area: TFE-E, TFE-HS, TFE-NW, TFE-SE, TFE-SW, TFE-W, VTFE-ELM, VTFE-HS

TFG area: TFG-1, TFG-N

TFH area: TF406, TF406-NW, TF518-N, TF518-PZ, TF5475-1, TF5475-2, TF5475-3, VTF406-HS, VTF511, VTF518-PZ, VTF5475

TFF started operation in February 1993 for fuel hydrocarbon remediation. In August 1995, the regulatory agencies agreed that the vadose zone remediation was complete, and in October 1996 a No Further Action status was granted for the ground water.

^b Totals are derived from individual extraction wells shown in Attachment B

^c Rounded number

Kft³ = thousands of cubic feet

Kgal = thousands of gallons

Table 2. VOC mass removed at the Livermore Site, April through June 2009.

Treatment Area^a	VOC mass removed from ground water (kg)	VOC mass removed from soil vapor (kg)	Total VOC mass removed (kg) ^b
TFA	1.1	-	1.1
TFB	0.8	-	0.8
TFC	1.8	-	1.8
TFD	6.3	0	6.3
TFE	1.5	0	1.5
TFG	0.08	-	0.1
TFH	0.3	7.7	8.0
TOTAL^b	11.9	7.7	19.6

Table 3. Historical summary of volumes of water and soil vapor removed at the Livermore Site through June 2009.

Treatment Area^a	Volume of ground water extracted (Mgal)	Volume of vapor extracted (Kft³)
TFA	1,595	-
TFB	371	-
TFC	380	-
TFD	839	49,708
TFE	305	124,223
TFG	60	-
TFH	134	169,307
TOTAL^b	3,684	343,238

Table 4. Historical summary of VOC mass removed from water and soil vapor at the Livermore Site through June 2009.

Treatment Area^a	VOC mass removed from ground water (kg)	VOC mass removed from soil vapor (kg)	Total VOC mass removed (kg) ^b
TFA	195	-	195
TFB	73	-	73
TFC	91	-	91
TFD	774	84	858
TFE	197	141	338
TFG	10	-	10
TFH	30	1,136	1,166
TOTAL^b	1,370	1,361	2,731

^a Refer to Table 1 footnote for facilities in each treatment facility area.^b Rounded number.

Abbreviations for Tables 2, 3 and 4:

Kft³ = thousands of cubic feet.

Kg = Kilograms.

Mgal = millions of gallons.

VOC = Volatile organic compound.

Attachment A

**VOC, Chromium, Bioassay,
Turbidity, and Chloride Analyses**

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFA													
TFA-I001	09-APR-09	E601	<0.5	1.2	0.66	<0.5	1.3	<1	<0.5	9	<0.5	0.95	<0.5
TFA-I001	04-MAY-09	E601	<0.5	0.66	0.5	<0.5	0.94	<1	<0.5	8	<0.5	0.69	<0.5
TFA-I001	03-JUN-09	E601	<0.5	0.66	0.53	<0.5	1	<1	<0.5	7.3	<0.5	0.66	<0.5
TFA-E001	09-APR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-E001	04-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-E001	03-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-E													
W-254	03-APR-09	E601	<0.5	0.55	0.62	<0.5	1	<1	<0.5	60	<0.5	1.7	<0.5
STU06-I	05-MAY-09	E601	<0.5	0.5	0.59	<0.5	1	<1	<0.5	59	<0.5	1.7	<0.5
STU06-I	01-JUN-09	E601	<0.5	<0.5	0.57	<0.5	0.88	<1	<0.5	57	<0.5	1.5	<0.5
STU06-E	03-APR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
STU06-E	05-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
STU06-E	01-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-W^a													
W-404	09-APR-09	E601	<0.5	<0.5	1.9	<0.5	2.7	<1	<0.5	11	<0.5	0.54	<0.5
W-404	21-MAY-09	E601	<0.5	<0.5	1.5	<0.5	2.2	<1	<0.5	9.4	<0.5	<0.5	<0.5
W-404	16-JUN-09	E601	<0.5	<0.5	1.6	<0.5	2.4	<1	<0.5	12	<0.5	<0.5	<0.5
TFA-W-E	21-MAY-09	E624	<1	<1	1.7	<1	2.6	<1	<1	9.7	<1	<0.5	<1
TFB													
TFB-I002	09-APR-09	E601	0.55	2.6	<0.5	<0.5	1.8	<1	4	1.8	<0.5	16	<0.5
TFB-I002	04-MAY-09	E601	0.54	2.5	<0.5	<0.5	1.7	<1	4.2	1.8	<0.5	16	<0.5
TFB-I002	02-JUN-09	E601	0.51	2.2	<0.5	<0.5	1.6	<1	3.7	1.8	<0.5	14	<0.5
TFB-E002	09-APR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFB-E002	04-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFB-E002	02-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC													
TFC-I003	06-APR-09	E601	<0.5	1.4	<0.5	<0.5	1.1	<1	13	6	<0.5	16	<0.5
TFC-I003	04-MAY-09	E601	<0.5	1.4	<0.5	<0.5	1	<1	13	5.6	<0.5	15	<0.5
TFC-I003	02-JUN-09	E601	<0.5	1.4	<0.5	<0.5	0.96	<1	12	5.4	<0.5	14	<0.5
TFC-E003	06-APR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFC (cont.)													
TFC-E003	04-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E003	02-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E													
MTU1-I	01-APR-09	E601	<0.5	13	<0.5	<0.5	0.81	<1	12	0.7	<0.5	8.6	2.8
MTU1-I	06-MAY-09	E601	<0.5	13	<0.5	<0.5	0.74	<1	18	2.6	<0.5	23	6.5
MTU1-I	03-JUN-09	E601	<0.5	17	<0.5	<0.5	1.1	<1	12	0.81	<0.5	11	4.4
MTU1-E	01-APR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU1-E	06-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU1-E	03-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-SE													
PTU1-I	06-APR-09	E601	<0.5	8.3	<0.5	<0.5	2.4	<1	15	0.55	<0.5	21	1.2
PTU1-I	04-MAY-09	E601	<0.5	8.8	<0.5	<0.5	2.6	<1	15	0.52	<0.5	20	1.1
PTU1-I	01-JUN-09	E601	<0.5	9	<0.5	<0.5	2.6	<1	14	0.56	<0.5	20	1.2
PTU1-E	06-APR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU1-E	04-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU1-E	01-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD^{bc}													
TFD-I004	08-APR-09	E601	1.4	2.4	<0.5	<0.5	0.91	<1	0.5	1.6	<0.5	42	34
TFD-I004	15-APR-09	E601	1.6	1.4	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	33	39
TFD-I004	02-JUN-09	E601	1.6	1.3	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	32	40
TFD-E004	08-APR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-E004	02-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-E													
PTU8-I	06-APR-09	E601	5.3	3.4	0.8	3.4	12	<1	0.72	22	<0.5	130	<0.5
PTU8-I	05-MAY-09	E601	5.4	4.7	0.74	3	11	<1	0.74	20	<0.5	140	<0.5
PTU8-I	01-JUN-09	E601	5.3	3.7	0.85	3.5	15	<1	0.75	25	<0.5	140	<0.5
PTU8-E	06-APR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU8-E	05-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU8-E	01-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFD-HPD^d	---	---	--	--	--	--	--	--	--	--	--	--	--
TFD-S^e													
PTU2-I	06-APR-09	E601	6.1	2.3	0.67	<0.5	19	<1	3.3	12	<0.5	330	1.4
PTU2-I	08-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	1.5	<1	<0.5	2.7	<0.5	22	<0.5
PTU2-I	05-JUN-09	E601	5	2.4	0.53	<0.5	16	<1	3	13	<0.5	310	1.2
PTU2-I	09-JUN-09	E601	3.7	1.9	<0.5	<0.5	12	<1	2.4	12	<0.5	220	0.85
PTU2-E	06-APR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU2-E	08-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU2-E	19-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU2-E	22-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU2-E	27-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU2-E	29-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU2-E	05-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU2-E	09-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-SE													
PTU11-I	03-APR-09	E601	0.89	1.8	2.2	8.6	31	1.6	<0.5	100	<0.5	240	<0.5
PTU11-I	05-MAY-09	E601	0.65	1.8	2.2	8.1	30	1.6	<0.5	100	<0.5	250	<0.5
PTU11-I	01-JUN-09	E601	0.54	1.9	2.2	8.8	25	1.7	<0.5	110	<0.5	220	<0.5
PTU11-E	03-APR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU11-E	05-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU11-E	01-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-SS													
PTU12-I	07-APR-09	E601	3.6	2.7	<0.5	1.2	9.1	<1	1	18	<0.5	130	7.3
PTU12-I	20-MAY-09	E601	2.8	2.9	<0.5	1.6	7.8	<1	1	19	<0.5	120	8.3
PTU12-I	04-JUN-09	E601	3.4	3	<0.5	1.3	9.2	<1	1.2	23	<0.5	140	8.1
PTU12-E	07-APR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU12-E	20-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU12-E	04-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-W													
PTU6-I	07-APR-09	E601	0.61	3.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	8.3	84
PTU6-I	20-MAY-09	E601	<0.5	3.3	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	6.2	77
PTU6-I	09-JUN-09	E601	0.53	3.4	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	7.4	89
PTU6-E	07-APR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFD-W (cont.)													
PTU6-E	20-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU6-E	09-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-E^f	---	---	--	--	--	--	--	--	--	--	--	--	--
TFE-HS													
GTU07-I	01-APR-09	E601	1.7	2.6	<0.5	<0.5	7.5	2.6	7.6	14	<0.5	250	<0.5
GTU07-I	06-MAY-09	E601	1.4	2.3	<0.5	<0.5	6.4	1.8	6.5	12	<0.5	250	<0.5
GTU07-I	04-JUN-09	E601	0.97	2	<0.5	<0.5	5.8	1.6	6.8	13	<0.5	200	<0.5
GTU07-E	01-APR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU07-E	06-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU07-E	04-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-NW													
PTU9-I	07-APR-09	E601	0.62	3.8	<0.5	<0.5	<0.5	<1	0.87	<0.5	<0.5	14	<0.5
PTU9-I	21-MAY-09	E601	0.6	4	<0.5	<0.5	<0.5	<1	0.83	<0.5	<0.5	13	<0.5
PTU9-I	04-JUN-09	E601	0.6	4	<0.5	<0.5	<0.5	<1	0.85	<0.5	<0.5	13	<0.5
PTU9-E	07-APR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU9-E	21-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU9-E	04-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-SE^{gh}													
W-359	19-MAY-09	E601	1.2	<0.5	<0.5	<0.5	6.4	<1	13	2.9	<0.5	51	<0.5
W-359	16-JUN-09	E601	3.7	0.5	<0.5	<0.5	9.1	<1	12	8.5	<0.5	100	0.86
MTU04-I	06-MAY-09	E601	0.93	<0.5	<0.5	<0.5	4.4	<1	10	2.5	<0.5	57	<0.5
MTU04-I	07-MAY-09	E601	0.98	<0.5	<0.5	<0.5	5.4	<1	11	2.8	<0.5	50	<0.5
MTU04-I	05-JUN-09	E601	1.7	<0.5	<0.5	<0.5	6.7	<1	10	4.9	<0.5	81	0.5
MTU04-E	06-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU04-E	19-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU04-E	05-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-SW													
MTU03-I	02-APR-09	E601	7	5.7	<0.5	1.6	5.2	17	0.62	6.7	<0.5	180	<0.5
MTU03-I	04-MAY-09	E601	7.9	5.2	<0.5	1.7	6	5	0.69	9	<0.5	240	<0.5
MTU03-I	03-JUN-09	E601	5.6	4.4	<0.5	1.5	4.1	4.3	<0.5	6.4	<0.5	170	<0.5
MTU03-E	02-APR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFE-SW (cont.)													
MTU03-E	04-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU03-E	03-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFE-W													
MTU05-I	08-APR-09	E601	<0.5	1	<0.5	<0.5	2.3	1.4	15	5.4	<0.5	32	<0.5
MTU05-I	04-MAY-09	E601	<0.5	1.1	<0.5	<0.5	2.7	1.5	19	6.6	<0.5	35	0.55
MTU05-I	03-JUN-09	E601	<0.5	0.97	<0.5	<0.5	2.2	1.3	15	5.8	<0.5	31	<0.5
MTU05-E	08-APR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU05-E	04-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU05-E	03-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFG-1													
W-1111	06-APR-09	E601	2.7	9.9	<0.5	<0.5	0.97	<1	0.51	1.4	<0.5	4.2	<0.5
GTU01-I	08-MAY-09	E601	2.7	9.5	<0.5	<0.5	1	<1	0.56	1.4	<0.5	4.2	<0.5
GTU01-I	09-JUN-09	E601	2.8	9.2	<0.5	<0.5	0.92	<1	<0.5	1.4	<0.5	4	<0.5
GTU01-E	06-APR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU01-E	08-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU01-E	09-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFG-Nⁱ	---	---	--	--	--	--	--	--	--	--	--	--	--
TF406													
PTU5-I	06-APR-09	E601	<0.5	0.69	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	6.4	<0.5
PTU5-I	08-MAY-09	E601	<0.5	0.92	<0.5	<0.5	<0.5	<1	0.57	<0.5	<0.5	7.8	<0.5
PTU5-I	04-JUN-09	E601	<0.5	0.89	<0.5	<0.5	<0.5	<1	0.6	<0.5	<0.5	8.2	<0.5
PTU5-E	06-APR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU5-E	08-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU5-E	04-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TF406-NW^{jk}													
W-1801	06-MAY-09	E601	<0.5	2	<0.5	<0.5	<0.5	<1	2.9	0.51	<0.5	19	<0.5
W-1801	21-MAY-09	E601	<0.5	2.1	<0.5	<0.5	<0.5	<1	4	0.72	<0.5	19	<0.5
W-1801	30-JUN-09	E601	<0.5	2	<0.5	<0.5	<0.5	<1	9.8	0.81	<0.5	36	<0.5
GTU03-I	10-JUN-09	E601	<0.5	1.9	<0.5	<0.5	<0.5	<1	8.7	0.87	<0.5	32	<0.5
GTU03-E	21-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TF406-NW (cont.)													
GTU03-E	10-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TF518-N^l	---	---	--	--	--	--	--	--	--	--	--	--	--
TF5475-1^m	---	---	--	--	--	--	--	--	--	--	--	--	--
TF5475-2ⁿ													
GTU09-I	08-MAY-09	E601	2.3	42	0.88	5.3	21	23	7	62	<0.5	490	<0.5
GTU09-I	03-JUN-09	E601	2.1	34	0.78	2.8	19	<1	4.9	48	<0.5	390	<0.5
GTU09-E	08-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU09-E	03-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TF5475-3^o	---	---	--	--	--	--	--	--	--	--	--	--	--

Notes on following page.

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

^a TFA-W effluent is discharged to the Livermore Water Reclamation Plant in accordance with Permit #1510G (2006-2008). The discharge limit for Total Toxic Organics is 1.0 mg/L.

^b TFD did not operate during the month of May due to preparatory work being conducted under the REVAL process.

^c TFD includes pre-startup extraction well sampling and monthly sampling results.

^d TFD-HPD did not operate during reporting period.

^e TFD-S includes pre-startup extraction well sampling and monthly sampling results.

^f TFE-E did not operate during reporting period.

^d TFE-SE did not operate during the month of April due to preparatory work being conducted under the REVAL process.

^h TFE-SE includes pre-startup extraction well sampling and monthly sampling results.

ⁱ TFG-N did not operate during this reporting period.

^j TF406-NW did not operate during the month of May due to preparatory work being conducted under the REVAL process.

^k TF406-NW includes pre-startup extraction well sampling and monthly sampling results.

^l TF518-N did not operate during this reporting period.

^m TF5475-1 did not operate during this reporting period.

ⁿ TF5475-2 did not operate during the month of April due to preparatory work being conducted under the REVAL process.

^o TF5475-3 did not operate during this reporting period.

Notes:

CCl₄ = Carbon tetrachloride

CHCl₃ = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFA													
W-109	10-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	0.51	2.5	<0.5	<0.5	<0.5
W-262 ^a	29-JAN-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	0.56	<0.5	<0.5	<0.5
W-408	10-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	0.74	<0.5	<0.5	<0.5
W-415	20-MAY-09	E601	<0.5	1.1	0.62	<0.5	1.4	<1	<0.5	14	<0.5	1.1	<0.5
W-457	20-MAY-09	E601	<0.5	<0.5	1.2	<0.5	1.3	<1	<0.5	8.3	<0.5	0.6	<0.5
W-518 ^a	24-APR-08	E601	<0.5	<0.5	7.3	<0.5	4	<1	<0.5	6.3	<0.5	0.67	<0.5
W-522 ^a	24-APR-08	E601	<0.5	<0.5	2.3	<0.5	1.5	<1	<0.5	3.5	<0.5	<0.5	<0.5
W-605	20-MAY-09	E601	<0.5	0.72	1.2	<0.5	1.6	<1	<0.5	21	<0.5	1.1	<0.5
W-614	20-MAY-09	E601	<0.5	0.81	<0.5	<0.5	<0.5	<1	<0.5	8	<0.5	<0.5	<0.5
W-712	20-MAY-09	E601	3	3	1.1	<0.5	3.3	<1	<0.5	1.6	<0.5	3.6	<0.5
W-714	20-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	12	<0.5	0.55	<0.5
W-903 ^a	29-JAN-08	E601	<0.5	<0.5	1.8	<0.5	1.4	<1	<0.5	7.5	<0.5	0.52	<0.5
W-904	20-MAY-09	E601	<0.5	<0.5	0.82	<0.5	1.2	<1	<0.5	9.2	<0.5	<0.5	<0.5
W-1001	20-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
W-1004	20-MAY-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	4.3	<0.5	<0.5	<0.5
W-1009 ^a	14-JAN-09	E601	0.82	3.5	0.93	<0.5	2.7	<1	<0.5	24	<0.5	2.2	<0.5
TFA-E													
W-254	03-APR-09	E601	<0.5	0.55	0.62	<0.5	1	<1	<0.5	60	<0.5	1.7	<0.5
TFA-W													
W-404	16-JUN-09	E601	<0.5	<0.5	1.6	<0.5	2.4	<1	<0.5	12	<0.5	<0.5	<0.5
TFB													
W-357	09-APR-09	E601	1.5	2.9	<0.5	<0.5	1.9	<1	5.6	1.4	<0.5	39	<0.5
W-610	09-APR-09	E601	<0.5	<0.5	<0.5	<0.5	1.8	<1	2.6	1.2	<0.5	3.6	<0.5
W-620	08-JUN-09	E601	<0.5	1.6	<0.5	<0.5	1.7	<1	2.8	1.8	<0.5	6.9	<0.5
W-621	09-APR-09	E601	<0.5	0.84	<0.5	<0.5	0.67	<1	1.4	0.55	<0.5	5.1	<0.5
W-655	09-APR-09	E601	<0.5	0.8	<0.5	<0.5	<0.5	<1	3.5	<0.5	<0.5	3	<0.5
W-704	09-APR-09	E601	0.65	3.9	<0.5	<0.5	2.2	<1	5.8	3.9	<0.5	30	<0.5
W-1423	09-APR-09	E601	0.9	5.5	<0.5	<0.5	3.6	<1	3.9	2	<0.5	11	<0.5
TFC													
W-701	06-APR-09	E601	<0.5	3.1	<0.5	<0.5	2.4	<1	34	0.6	<0.5	13	0.52
W-1015	06-APR-09	E601	<0.5	0.6	<0.5	<0.5	1	<1	2.2	1.3	<0.5	5.7	<0.5
W-1102	06-APR-09	E601	<0.5	<0.5	<0.5	<0.5	0.57	<1	8.9	<0.5	<0.5	2.5	<0.5
W-1103	06-APR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	1.9	<0.5
W-1104	06-APR-09	E601	<0.5	0.97	<0.5	<0.5	0.52	<1	5.3	11	<0.5	24	<0.5
W-1116	06-APR-09	E601	<0.5	2.1	<0.5	<0.5	0.59	<1	8	3	<0.5	4.1	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFC-E													
W-368	01-APR-09	E601	<0.5	13	<0.5	<0.5	0.8	<1	18	2.6	<0.5	20	6.4
W-413	01-APR-09	E601	<0.5	14	<0.5	<0.5	0.9	<1	12	<0.5	<0.5	6.9	2.4
TFC-SE													
W-1213	04-MAY-09	E601	<0.5	7.3	<0.5	<0.5	3.2	<1	7.1	<0.5	<0.5	20	0.5
W-2201	04-MAY-09	E601	<0.5	8.6	<0.5	<0.5	1.8	<1	19	0.8	<0.5	19	1.5
TFD													
W-351	08-APR-09	E601	5.3	1.3	<0.5	<0.5	1.6	<1	1.2	2.4	<0.5	120	0.83
W-653 ^a	07-JUL-08	E601	40	12	<0.5	<0.5	1.5	<1	5.3	1.5	<0.5	1400	<0.5
W-906	08-APR-09	E601	<0.5	0.96	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.7	0.62
W-907-2	08-APR-09	E601	<0.5	7.2	<0.5	0.6	4.2	<1	1.6	7.8	<0.5	92	<0.5
W-1206	08-APR-09	E601	0.61	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	13	5.7
W-1208	08-APR-09	E601	2.1	2.3	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	40	81
W-2011 ^a	04-APR-07	E601	3.1	2.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	77	<0.5
W-2101 ^a	04-APR-07	E601	17	5.2	<0.5	<0.5	0.68	<1	2.7	0.83	<0.5	450	<0.5
W-2102 ^a	04-APR-07	E601	28	9.7	<0.5	<0.5	0.74	<1	3.6	0.77	<0.5	840	1.8
TFD-E													
W-1253 ^{ab}	11-FEB-08	E601	6	6.2	<5	<5	16	<10	17	12	<5	2300	<5
W-1255 ^a	11-FEB-08	E601	4.4	2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	260	<0.5
W-1301	06-APR-09	E601	5.3	2.8	3.1	11	76	1.1	0.76	49	<0.5	440	<0.5
W-1303 ^a	14-OCT-08	E601	3	2.9	0.8	3.1	7.2	<1	<0.5	6.7	<0.5	150	23
W-1306	06-APR-09	E601	6.3	2.8	<0.5	<0.5	0.8	<1	0.55	3.5	<0.5	130	<0.5
W-1307	06-APR-09	E601	1.8	<0.5	<0.5	<0.5	<0.5	<1	<0.5	0.5	<0.5	27	<0.5
W-1404	06-APR-09	E601	<0.5	16	2.1	16	11	2.4	<0.5	85	<0.5	180	0.64
W-1550	06-APR-09	E601	17	3.6	<0.5	<0.5	2.8	<1	1.8	12	<0.5	170	<0.5
W-2006 ^a	14-OCT-08	E601	1.3	2.4	2.9	9.5	88	1.3	<0.5	83	<0.5	690	<0.5
W-2203	06-APR-09	E601	14	2.2	<0.5	<0.5	3	<1	3.6	5.8	<0.5	140	<0.5
TFD-HPD^c													
W-1254 ^a	04-OCT-07	E601	0.88	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	14	<0.5
W-1551 ^a	04-OCT-07	E601	11	4.4	<0.5	<0.5	1.6	<1	3	3.1	<0.5	210	<0.5
W-1552 ^a	20-DEC-07	E601	<0.5	0.96	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	22	<0.5
W-1650 ^a	20-DEC-07	E601	7.1	1.8	<0.5	<0.5	<0.5	<1	2.6	<0.5	<0.5	260	<0.5
W-1651 ^a	20-DEC-07	E601	1.3	1.1	<0.5	<0.5	<0.5	<1	0.61	<0.5	<0.5	64	<0.5
W-1652 ^a	18-DEC-07	E601	3	2	<0.5	<0.5	<0.5	3.7	1	0.54	<0.5	420	<0.5
W-1653 ^a	18-DEC-07	E601	1.4	0.9	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	74	<0.5
W-1654 ^a	18-DEC-07	E601	<0.5	0.55	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	25	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFD-HPD (cont.)													
W-1655 ^a	18-DEC-07	E601	0.62	0.94	<0.5	<0.5	<0.5	<1	<0.5	1	<0.5	49	<0.5
W-1656 ^a	18-DEC-07	E601	2.5	0.97	<0.5	<0.5	<0.5	<1	0.88	<0.5	<0.5	100	<0.5
W-1657 ^a	18-DEC-07	E601	12	5.1	<0.5	<0.5	<0.5	<1	4.2	0.52	<0.5	1200	<0.5
TFD-S													
W-1503	16-JUN-09	E601	6.6	3.3	0.51	0.59	14	<1	2.9	9.5	<0.5	290	1.3
W-1504	16-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	10	<1	2.6	21	<0.5	82	<0.5
W-1510	16-JUN-09	E601	<0.5	<0.5	<0.5	<0.5	1.4	<1	<0.5	3.2	<0.5	22	<0.5
TFD-SE													
W-314 ^a	07-JAN-08	E601	1.6	8.9	0.72	1.7	11	<1	5	21	<0.5	170	<0.5
W-1308	03-APR-09	E601	<0.5	1.9	2.5	10	27	2	<0.5	110	<0.5	260	<0.5
W-1403 ^a	02-JUL-08	E601	2.9	19	1.5	6.6	51	<1	3.9	98	<0.5	430	<0.5
W-1904 ^a	26-DEC-07	E601	<0.5	<0.5	0.54	0.67	5.8	<1	<0.5	39	<0.5	42	<0.5
W-2005	03-APR-09	E601	1.9	1.5	1.4	3.7	40	<1	<0.5	65	<0.5	200	<0.5
SIP-ETC-201 ^a	26-DEC-07	E601	<0.5	0.55	0.59	1.1	8.5	<1	<0.5	59	<0.5	60	<0.5
TFD-SS													
W-1523	07-APR-09	E601	5.8	2.9	<0.5	1.4	12	<1	1.5	17	<0.5	180	<0.5
W-1601	07-APR-09	E601	4.1	4.7	1.8	6.8	30	1.3	1.8	100	<0.5	300	<0.5
W-1602	07-APR-09	E601	<0.5	2	<0.5	<0.5	0.5	<1	<0.5	0.82	<0.5	17	20
W-1603 ^a	11-APR-08	E601	1.6	2	1.2	4.8	16	1.2	<0.5	33	<0.5	170	8.6
TFD-W													
W-1215 ^a	15-JUL-08	E601	<0.5	6.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	5.6	34
W-1216	07-APR-09	E601	<0.5	3.7	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	6.2	58
W-1902	07-APR-09	E601	0.7	3.3	<0.5	<0.5	<0.5	<1	0.54	<0.5	<0.5	9.6	97
TFE-E^c													
W-566	24-JUN-09	E601	0.67	5	<0.5	<0.5	5.8	1.1	9	11	<0.5	100	<0.5
W-1109	24-JUN-09	E601	<0.5	0.52	0.72	<0.5	62	<1	12	140	<0.5	350	<0.5
W-1903 ^a	30-JUL-07	E601	<0.5	<0.5	<0.5	<0.5	23	<1	11	21	<0.5	36	<0.5
W-1909	28-APR-09	E601	<0.5	1.4	3.3	<0.5	180	3.1	12	390	<0.5	590	<0.5
W-2305	24-JUN-09	E601	<0.5	1.7	2.3	0.56	300	3.8	38	700	<0.5	1700	0.51
TFE-HS													
W-2012	16-JUN-09	E601	1.4	2.4	<0.5	<0.5	7.2	1.8	8.4	17	<0.5	240	<0.5
W-2105	16-JUN-09	E601	<0.5	0.74	<0.5	<0.5	0.79	<1	1.6	8.6	<0.5	210	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFE-NW													
W-1211	07-APR-09	E601	0.64	3.9	<0.5	<0.5	<0.5	<1	0.9	<0.5	<0.5	14	<0.5
W-1409 ^a	10-APR-08	E601	<0.5	<0.5	<0.5	<0.5	1.2	<1	0.57	1.7	<0.5	30	<0.5
TFE-SE													
W-359	16-JUN-09	E601	3.7	0.5	<0.5	<0.5	9.1	<1	12	8.5	<0.5	100	0.86
TFE-SW													
W-1518 ^a	14-JUL-08	E601	<0.5	0.6	<0.5	<0.5	1.9	2.2	1.9	1.1	<0.5	17	<0.5
W-1520	02-APR-09	E601	3.9	6	<0.5	1.5	1.7	68	<0.5	3.8	<0.5	100	<0.5
W-1522	02-APR-09	E601	7.2	4.9	<0.5	1.4	6.4	5.4	0.77	7.7	<0.5	230	<0.5
TFE-W													
W-292	08-APR-09	E601	<0.5	0.85	<0.5	<0.5	1.2	3.1	1.7	1.5	<0.5	24	<0.5
W-305	08-APR-09	E601	<0.5	1.3	<0.5	<0.5	3.6	<1	26	9.7	<0.5	42	0.89
TFG-1													
W-1111	06-APR-09	E601	2.7	9.9	<0.5	<0.5	0.97	<1	0.51	1.4	<0.5	4.2	<0.5
TFG-N^c													
W-1806 ^a	09-APR-08	E601	<0.5	2.4	<0.5	<0.5	<0.5	<1	<0.5	12	<0.5	2.4	<0.5
W-1807 ^a	10-APR-08	E601	<0.5	2	<0.5	<0.5	1.5	<1	1.5	16	<0.5	5.4	<0.5
TF406													
W-1309	06-APR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	2.1	<0.5
W-1310	06-APR-09	E601	<0.5	0.84	<0.5	<0.5	<0.5	<1	0.62	<0.5	<0.5	8.4	<0.5
GSW-445 ^a	26-MAR-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3	<0.5
TF406-NW													
W-1801	30-JUN-09	E601	<0.5	2	<0.5	<0.5	<0.5	<1	9.8	0.81	<0.5	36	<0.5
TF518-N^c													
W-1410 ^a	23-JAN-08	E601	2.8	1.5	<0.5	<0.5	<0.5	<1	<0.5	0.83	<0.5	18	<0.5
TF518-PZ^d													
W-1615 ^a	07-FEB-08	E601	0.58	0.84	<0.5	<0.5	3	<1	<0.5	42	<0.5	130	<0.5
W-518-1913 ^a	07-FEB-08	E601	<0.5	<0.5	<0.5	<0.5	7.5	<1	<0.5	18	<0.5	34	<0.5
W-518-1914 ^a	07-FEB-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	20	<0.5	5.6	<0.5
W-518-1915 ^{ab}	07-FEB-08	E601	<25	<25	<25	<25	180	<50	<25	1500	<25	12000	<25
SVB-518-201 ^a	07-FEB-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	35	<0.5	8.5	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TF518-PZ (cont.)													
SVB-518-204 ^a	07-FEB-08	E601	<0.5	0.63	<0.5	<0.5	1.4	<1	<0.5	43	<0.5	550	<0.5
TF5475-1^c													
W-1302-2 ^a	18-JUL-07	E601	1.8	19	0.73	3.4	20	<1	7.4	41	<0.5	260	<0.5
TF5475-2													
W-1108	08-MAY-09	E601	2.3	42	0.98	4.4	25	21	7.5	62	<0.5	640	<0.5
W-1415	12-MAY-09	E601	0.63	5.4	<0.5	<0.5	9	<1	2.3	8	<0.5	65	<0.5
TF5475-3^c													
W-1604 ^a	21-AUG-07	E601	2.9	29	0.94	5.2	23	<1	17	45	<0.5	390	<0.5
W-1605 ^a	21-AUG-07	E601	1.3	13	<0.5	5.7	7.2	1.2	4	21	<0.5	210	<0.5
W-1608 ^a	21-AUG-07	E601	<0.5	9.5	0.71	3.2	2.1	3.2	1.8	7.1	<0.5	69	<0.5
W-1609 ^a	21-AUG-07	E601	<0.5	13	0.55	9.4	2.7	<1	0.94	7.9	<0.5	62	<0.5

Notes on following page.

Table A-2. VOC analyses of samples from treatment facility extraction wells.

^a Most recent VOC sample results available.

^b Elevated detection limit due to dilution.

^c Treatment Facility did not operate during reporting period. Please refer to Table A-1 for details.

^d No ground water was extracted from TF518-PZ wells during reporting period.

Notes:

CCl₄ = Carbon tetrachloride

CHCl₃ = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE PPM(V/V)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
VTDF-ETCS^a													
W-1904	09-JUN-09	TO15DIT	<0.005	0.041	0.0056	<0.005	0.25	<0.005	<0.005	2.1	<0.005	0.67	<0.005
W-ETC-2003	09-JUN-09	TO15DIT	<0.005	<0.005	<0.005	<0.005	0.012	<0.005	<0.005	1.3	<0.005	0.31	<0.005
W-ETC-2004A	09-JUN-09	TO15DIT	<0.005	0.0098	<0.005	<0.005	0.039	<0.005	<0.005	2	<0.005	0.75	<0.005
W-ETC-2004B	09-JUN-09	TO15DIT	<0.01	0.16	0.036	<0.01	0.49	<0.01	<0.01	6.4	<0.01	3.2	<0.01
SIP-ETC-201	09-JUN-09	TO15DIT	<0.005	0.009	0.037	0.0059	0.65	<0.005	<0.005	2.9	<0.005	1.4	<0.005
VTDF-HPD^b													
W-1552 ^c	13-FEB-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.011	<0.005	0.2	<0.005
W-1650 ^c	03-JUL-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-1651 ^c	03-JUL-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-1652 ^c	03-JUL-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-1653 ^c	03-JUL-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-1654 ^c	03-JUL-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-1655 ^c	03-JUL-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-1656 ^c	03-JUL-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-1657 ^c	03-JUL-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
W-HPA-002B ^c	03-JUL-07	TO15DI	0.032	0.024	<0.0057	<0.0057	0.011	<0.0057	<0.0057	0.1	<0.0057	1	<0.0057
VTDF-HS^d													
W-653 ^c	15-FEB-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.093	<0.005
W-2011 ^c	15-FEB-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.081	<0.005
W-2101 ^c	15-FEB-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.061	<0.005
W-2102 ^c	15-FEB-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.11	<0.005
VTFE-ELM^e													
W-1903 ^c	16-AUG-07	TO15DI	<0.0084	<0.0084	<0.0084	<0.0084	1.4	<0.0084	0.36	1.4	<0.0084	1.5	<0.0084
W-1909 ^c	16-JUL-07	TO15DI	<0.008	<0.008	<0.008	<0.008	1.2	<0.008	0.36	0.04	<0.008	0.19	<0.008
W-2305 ^c	16-AUG-07	TO15DI	<0.005	<0.005	<0.005	<0.005	0.014	<0.005	0.016	0.064	<0.005	0.069	<0.005
W-543-001 ^c	05-FEB-08	TO15DI	<0.005	<0.005	<0.005	<0.005	0.0096	<0.005	<0.005	0.13	<0.005	0.038	<0.005
W-543-003 ^c	05-FEB-08	TO15DI	<0.005	0.0069	<0.005	<0.005	0.052	<0.005	0.012	0.11	<0.005	0.29	<0.005
W-543-1908 ^c	05-FEB-08	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.015	<0.005	0.023	<0.005
VTFE-HS^f													
W-ETS-2008A ^c	30-JAN-08	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.031	<0.005	0.057	<0.005
W-ETS-2008B ^c	05-FEB-08	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.015	0.14	<0.005	0.4	<0.005
W-ETS-2009 ^c	30-JAN-08	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.062	<0.005	0.092	<0.005
W-ETS-2010A ^c	30-JAN-08	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.046	<0.005	0.096	<0.005
W-ETS-2010B ^c	30-JAN-08	TO15DI	<0.005	<0.005	<0.005	<0.005	0.021	0.0054	0.058	0.37	<0.005	1	<0.005
W-2105 ^c	30-JAN-08	TO15DI	<0.005	<0.005	<0.005	<0.005	0.014	<0.005	0.01	0.022	<0.005	0.13	<0.005

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CCl ₄ <-	CHCl ₃ -	1,1-DCA -	1,2-DCA -	1,1-DCE PPM(V/V)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
VTF406-HS													
W-217	07-MAY-09	TO15DIT	0.4	0.037	0.016	<0.005	1.7	0.012	0.42	2.6	<0.005	2.3	0.0084
W-514-2007A	07-MAY-09	TO15DIT	0.021	<0.005	<0.005	<0.005	0.014	<0.005	0.012	0.057	<0.005	0.48	0.28
W-514-2007B	07-MAY-09	TO15DIT	0.19	0.019	0.013	<0.01	1.7	<0.01	0.16	1.4	<0.01	4.1	0.098
VTF511^g													
W-274 ^c	04-OCT-06	TO15DI	0.14	0.02	<0.0062	<0.0062	0.07	<0.0062	0.014	0.33	<0.0062	6.1	0.38
W-1517 ^c	20-DEC-07	TO15DI	0.0066	<0.005	<0.005	<0.005	0.0068	<0.005	<0.005	0.022	<0.005	0.65	0.016
W-2204	21-MAY-09	TO15DIT	0.098	0.034	<0.005	0.038	0.019	<0.005	0.0082	0.42	<0.005	3.9	<0.005
W-2206	21-MAY-09	TO15DIT	0.013	0.022	<0.005	0.024	<0.005	<0.005	<0.005	0.24	<0.005	2	<0.005
W-2207A	14-MAY-09	TO15DIT	<0.005	0.0055	<0.005	<0.005	0.0053	<0.005	<0.005	0.01	<0.005	1.5	<0.005
W-2207B	18-JUN-09	TO15DIT	0.033	0.027	<0.0084	<0.0084	0.11	<0.0084	<0.0084	0.058	<0.0084	8.2	0.011
W-2208A	14-MAY-09	TO15DIT	0.025	0.016	<0.01	<0.01	0.05	<0.01	<0.01	0.019	<0.01	9.8	0.026
W-2208B	18-JUN-09	TO15DIT	1.1	0.26	0.22	<0.12	6.2	0.16	0.35	1.7	<0.12	97	0.32
W-2205	21-MAY-09	TO15DIT	0.18	0.033	<0.005	0.0052	0.045	<0.005	0.0078	0.23	<0.005	3.6	0.012
VTF518-PZ^h													
W-1615 ^c	15-JAN-08	TO15DI	0.1	<0.025	<0.025	<0.025	0.96	<0.025	0.96	8.7	<0.025	17	<0.025
W-518-1913 ^c	15-JAN-08	TO15DI	0.012	0.006	0.007	<0.005	1.7	<0.005	0.063	2	<0.005	4.5	<0.005
W-518-1914 ^c	15-JAN-08	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.98	<0.005	0.28	<0.005
W-518-1915 ^c	15-JAN-08	TO15DI	<0.0066	<0.0066	<0.0066	<0.0066	0.29	<0.0066	0.01	1.6	<0.0066	5.9	<0.0066
SVB-518-201 ^c	15-JAN-08	TO15DI	<0.005	<0.005	<0.005	<0.005	0.016	<0.005	<0.005	3.9	<0.005	0.34	<0.005
SVB-518-204 ^c	15-JAN-08	TO15DI	<0.02	<0.02	<0.02	<0.02	0.051	<0.02	<0.02	2.4	<0.02	15	<0.02
VTF5475ⁱ													
W-ETS-507 ^c	06-SEP-07	TO15DI	<0.005	0.85	<0.005	0.62	<0.005	<0.005	<0.005	0.15	<0.005	0.67	<0.005
W-1605 ^c	06-SEP-07	TO15DI	0.0069	0.17	<0.005	0.15	0.11	<0.005	0.036	0.1	<0.005	0.85	<0.005
W-1608 ^c	06-SEP-07	TO15DI	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0061	<0.005
W-2211 ^c	12-OCT-07	TO15DI	<0.005	0.49	0.012	0.15	0.14	<0.005	0.01	0.11	<0.005	1.2	<0.005
W-2212 ^c	12-OCT-07	TO15DI	0.056	0.75	0.024	0.039	1.1	<0.005	0.16	0.66	<0.005	3.8	<0.005
W-2302 ^c	05-OCT-07	TO15DI	0.032	0.47	0.022	<0.017	0.73	<0.017	0.063	0.86	<0.017	11	<0.017
W-2303 ^c	05-OCT-07	TO15DI	0.009	0.88	0.038	0.083	0.4	<0.005	0.0088	0.36	<0.005	3.7	<0.005
SVI-ETS-504 ^c	12-OCT-07	TO15DI	<0.005	0.32	0.0052	0.14	0.073	<0.005	<0.005	0.064	<0.005	0.34	<0.005

Notes on following page.

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

^a VTFD-ETCS did not operate during reporting period.

^b VTFD-HPD did not operate during reporting period.

^c Most recent VOC vapor sample results available.

^d VTFD-HS did not operate during reporting period.

^e VTFE-ELM did not operate during reporting period.

^f VTFE-HS did not operate during reporting period.

^g VTF511 did not operate during the month of April due to preparatory work being conducted under the REVAL process.

^h VTF518-PZ did not operate during reporting period.

ⁱ VTF5475 did not operate during reporting period.

Notes:

CCl₄ = Carbon tetrachloride

CHCl₃ = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

Table A-4. Chromium analyses of influent, effluent and receiving water samples by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Chromium (total)^a mg/L (ppm)	Hexavalent Chromium mg/L (ppm)
TFB	TFB-E002	09-APR-09	0.019	NA
	TFB-E002	04-MAY-09	0.019	NA
	TFB-E002	02-JUN-09	0.019	NA
TFC	TFC-E003	06-APR-09	0.021	NA
	TFC-E003	04-MAY-09	0.021	NA
	TFC-E003	02-JUN-09	0.023	NA
TFC-E	MTU1-I	01-APR-09	0.045	NA
	MTU1-E	01-APR-09	<0.005	<0.005
	MTU1-E	06-MAY-09	<0.001	NA
	MTU1-E	03-JUN-09	0.0033	NA
TFC-SE	PTU1-E	06-APR-09	0.032	NA
	PTU1-E	04-MAY-09	0.031	NA
	PTU1-E	01-JUN-09	0.033	NA
TFD	TFD-I004	08-JUN-09	0.0093	NA
	TFD-E004	08-JUN-09	0.012	0.009
TFE-SE	W-359	19-MAY-09	0.007	NA
	MTU04-E	19-MAY-09	0.0065	0.0068
TF406-NW	W-1801	21-MAY-09	0.0043	NA
	GTU03-E	21-MAY-09	<0.005	<0.005
TF5475-2	GTU09-I	03-JUN-09	0.015	NA
	GTU09-E	03-JUN-09	<0.005	<0.005

^aA discharge limit of 0.050 ppm is set for total chromium during the dry season (April 1-November 30), and no limit is set for total chromium for the wet season (December 1-March 31); however, a limit of 0.022 ppm hexavalent chromium applies during the wet season. Discharge limits are defined in the Explanation of Significant Differences for metals discharge limits (April 1997).

Shaded values exceeded the discharge limit. See text for explanation.

Table A-5. Bioassay, turbidity, and chloride analyses of influent and effluent samples by treatment facility.

Treatment Facility	Sample Station	Date Sampled	Aquatic Bioassay^a Percent Survival	Turbidity Nephelometric Turbidity Units (NTU)	Chloride (mg/L)
TFA	TFA-I001	09-APR-09	NA	NA	83
TFA	TFA-E001	09-APR-09	100 (100)	1	84
TFC-E	MTU1-E	01-APR-09	100 (100)	<0.1	180
TFD	TFD-E004	08-JUN-09	100 (100)	0.1	370
TFE-SE	MTU04-E	19-MAY-09	100 (100)	<0.1	77
TF406	PTU5-I	04-JUN-09	NA	NA	72
TF406-NW	GTU03-E	21-MAY-09	NA	0.1	47
	GTU03-E	10-JUN-09	100 (100)	NA	NA
TF5475-2	GTU09-E	03-JUN-09	100 (100)	0.12	84

^aTest species was Fathead minnow and the test duration was 96 hours.

Percent survival in the control group samples shown in parentheses.

Note: NA = not applicable

Explanation of Abbreviations

TFA-I001 is a sampling port located immediately prior to the TFA Treatment System.

TFA-E001 is a sampling port located immediately after the TFA Treatment System, at the beginning of the discharge pipeline.

TFA receiving water is routinely sampled at the TFG-ASW location.

TFA-W-I is an influent sampling port prior to the sediment bag filter immediately following W-404.

TFA-W-E is an effluent sampling port immediately following the sediment bag filter; the water is then discharged to the Livermore Water Reclamation Plant (LWRP).

TFB-I002 is a sampling port located immediately prior to the TFB Treatment System.

TFB-E002 is a sampling port located immediately after the TFB Treatment System, at the beginning of the discharge pipeline.

TFB-R002 is a sampling station in the drainage ditch north of TFB, located approximately 75 ft downstream from the discharge point.

TFC-I003 is a sampling port located immediately prior to the TFC Treatment System.

TFC-E003 is a sampling port located immediately after the TFC Treatment System, at the beginning of the discharge pipeline.

TFC-R003 is a sampling station in Arroyo Las Positas, located approximately 75 ft downstream from the TFC discharge point.

TFD-I004 is a sampling port located immediately prior to the TFD Treatment System.

TFD-E004 is a sampling port located immediately after the TFD Treatment System, prior to discharge to the Drainage Retention Basin or to the underground discharge pipeline leading to Arroyo Las Positas.

TFD-R004 is now combined with and collected at the TFC-R003 location. Results are reported under TFC-R003, as approved by the RWQCB.

CRD1-I is a sampling port located immediately prior to the catalytic column in the Catalytic Reductive Dehalogenation treatment unit 1 (CRD1).

CRD1-E is the effluent from the catalytic column in the Catalytic Reductive Dehalogenation treatment unit 1 (CRD1) and then reinjected at W-1302.

CRD2-I is a sampling port located immediately prior to the catalytic columns in the Catalytic Reductive Dehalogenation treatment unit 2 (CRD2).

CRD2-E is the effluent from the last catalytic column in the Catalytic Reductive Dehalogenation treatment unit 2 (CRD2) and then reinjected at W-1610.

GTU01-I is a sampling port located immediately prior to GTU01, which is currently operating in the TFG-1 area.

GTU01-E is a sampling port located immediately after GTU01, which is currently operating in the TFG-1 area.

GTU01 receiving water is routinely sampled at the TFG-ASW location.

GTU03-I is a sampling port located immediately prior to GTU03, which is currently operating in the TF406 Northwest area.

GTU03-E is a sampling port located immediately after GTU03, which is currently operating in the TF406 Northwest area.

GTU03 receiving water is routinely sampled at the TFC-R003 location.

GTU07-I is a sampling port located immediately prior to GTU07, which is currently operating in the TFE Hotspot area.

GTU07-E is a sampling port located immediately after GTU07, which is currently operating in the TFE Hotspot area.

GTU07 receiving water is routinely sampled at the TFC-R003 location.

GTU09-I is a sampling port located immediately prior to GTU09, which is currently operating in the TF5475 area.

GTU09-E is a sampling port located immediately after GTU09, which is currently operating in the TF5475 area.

GTU09 receiving water is routinely sampled at the TFC-R003 location.

MTU02-I is a sampling port located immediately prior to MTU02, which is currently operating in the TFG North area.

MTU02-E is a sampling port located immediately after MTU02, which is currently operating in the TFG North area.

MTU02 receiving water is routinely sampled at the TFC-R003 location.

MTU03-I is a sampling port located immediately prior to MTU03, which is currently operating in the TFE Southwest area.

MTU03-E is a sampling port located immediately after MTU03, which is currently operating in the TFE Southwest area.

MTU03 receiving water is routinely sampled at the TFC-R003 location.

MTU04-I is a sampling port located immediately prior to MTU04, which is currently operating in the TFE Southeast area.

MTU04-E is a sampling port located immediately after MTU04, which is currently operating in the TFE Southeast area.

MTU04 receiving water is routinely sampled at the TFC-R003 location.

MTU05-I is a sampling port located immediately prior to MTU05, which is currently operating in the TFE West area.

MTU05-E is a sampling port located immediately after MTU05, which is currently operating in the TFE West area.

MTU05 receiving water is routinely sampled at the TFC-R003 location.

Explanation of Abbreviations

MTU1-I is a sampling port located immediately prior to MTU1, which is currently operating in the TFC East area.

MTU1-E is a sampling port located immediately after MTU1, which is currently operating in the TFC East area.

MTU1 receiving water is routinely sampled at the TFC-R003 location.

PTU1-I is a sampling port located immediately prior to PTU-1, which is currently operating in the TFC Southeast area.

PTU1-E is a sampling port located immediately after PTU-1, which is currently operating in the TFC Southeast area.

PTU1 receiving water is routinely sampled at the TFC-R003 location.

PTU2-I is a sampling port located immediately prior to PTU-2, which is currently operating in the TFD South area.

PTU2-E is a sampling port located immediately after PTU-2, which is currently operating in the TFD South area.

PTU2 receiving water is routinely sampled at TFC-R003 during the wet season.

PTU3-I is a sampling port located immediately prior to PTU-3, which is currently operating in the TFE East area.

PTU3-E is a sampling port located immediately after PTU-3, which is currently operating in the TFE East area.

PTU3 receiving water is routinely sampled at the TFC-R003 location.

PTU5-I is a sampling port located immediately prior to PTU-5, which is currently operating in the TF406 extraction location.

PTU5-E is a sampling port located immediately after PTU-5, which is currently operating in the TF406 extraction location.

PTU5 receiving water is routinely sampled at the TFC-R003 location.

PTU6-I is a sampling port located immediately prior to PTU-6, which is currently operating in the TFD West area.

PTU6-E is a sampling port located immediately after PTU-6, which is currently operating in the TFD West area.

PTU6 receiving water is routinely sampled at the TFC-R003 location.

PTU8-I is a sampling port located immediately prior to PTU-8, which is currently operating in the TFD East area.

PTU8-E is a sampling port located immediately after PTU-8, which is currently operating in the TFD East area.

PTU8 receiving water is routinely sampled at the TFC-R003 location.

PTU9-I is a sampling port located immediately prior to PTU-9, which is currently operating in the TFE Northwest area.

PTU9-E is a sampling port located immediately after PTU-9, which is currently operating in the TFE Northwest area.

PTU9 receiving water is routinely sampled at the TFC-R003 location.

PTU10-I is a sampling port located immediately prior to PTU-10, which is currently operating in the TFD Helipad area.

PTU10-E is a sampling port located immediately after PTU-10, which is currently operating in the TFD Helipad area.

PTU10 receiving water is routinely sampled at the TFC-R003 location.

PTU11-I is a sampling port located immediately prior to PTU-11, which is currently operating in the TFD Southeast area.

PTU11-E is a sampling port located immediately after PTU-11, which is currently operating in the TFD Southeast area.

PTU11 receiving water is routinely sampled at the TFC-R003 location.

PTU12-I is a sampling port located immediately prior to PTU-12, which is currently operating in the TFD Southshore area.

PTU12-E is a sampling port located immediately after PTU-12, which is currently operating in the TFD Southshore area.

PTU12 receiving water is routinely sampled at the TFC-R003 location.

STU06-I is a sampling port located immediately prior to STU06, which is operating in the TFA East area.

STU06-E is a sampling port located immediately after STU06, which is operating in the TFA East area.

STU06 receiving water is routinely sampled at the TFG-ASW location.

STU09-I is a sampling port located immediately prior to STU09, which is currently operating in the TF518-North area.

STU09-E is a sampling port located immediately after STU09, which is currently operating in the TF518-North area.

STU09 receiving water is routinely sampled at the TFC-R003 location.

Addendum to Attachment A

Treatment Facility Monitor and Extraction Well Data

Addendum. VOC analyses for nearby monitor wells and extraction wells associated with treatment facilities restarted during the 2nd quarter of 2009.

Sample Station	Date Sampled	Analytic Method ^a	CCl4	CHCl3	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE	Freon 113	PCE	1,1,1-TCA	TCE	Freon 11
			<-	-	-	-	-	-	-	-	-	-	->
TFC-E													
Extraction Wells^b													
W-368	08-Jan-08	E601	<0.5	11	<0.5	<0.5	0.82	<1	18	2.3	<0.5	16	3.7
W-368	19-Feb-09	E601	<0.5	15	<0.5	<0.5	1	<1	17	2.7	<0.5	23	6.9
W-368	02-Mar-09	E601	<0.5	16	<0.5	<0.5	1.1	<1	18	3	<0.5	24	7.9
W-368	01-Apr-09	E601	<0.5	13	<0.5	<0.5	0.8	<1	18	2.6	<0.5	20	6.4
W-413	08-Jan-08	E601	<0.5	15	<0.5	<0.5	1.2	<1	11	<0.5	<0.5	8.1	3.7
W-413	19-Feb-09	E601	<0.5	10	<0.5	<0.5	0.89	<1	20	<0.5	<0.5	6.6	2.5
W-413	01-Apr-09	E601	<0.5	14	<0.5	<0.5	0.9	<1	12	<0.5	<0.5	6.9	2.4
Monitor Wells^c													
W-317	30-Jul-07	E601	<0.5	26	<0.5	<0.5	1.8	<1	1.9	0.5	<0.5	23	53
W-317	17-Sep-08	E601	<0.5	22	<0.5	<0.5	1.2	<1	2.4	<0.5	<0.5	20	45
W-317	21-Oct-08	E601	<0.5	19	<0.5	<0.5	1.1	<1	2.4	<0.5	<0.5	19	43
W-317	18-Feb-09	E601	<0.5	13	<0.5	<0.5	0.81	<1	1.8	<0.5	<0.5	15	36
W-502	25-Jul-07	E601	<0.5	1.4	<0.5	<0.5	4.9	<1	8.3	<0.5	<0.5	8	<0.5
W-502	26-Aug-08	E601	<0.5	1.1	<0.5	<0.5	3.8	<1	4.5	<0.5	<0.5	<0.5	<0.5
W-502	17-Feb-09	E601	<0.5	0.96	<0.5	<0.5	3.7	<1	3.7	<0.5	<0.5	7.4	<0.5
W-568	30-Jul-07	E601	<0.5	6.4	<0.5	<0.5	<0.5	<1	2.6	<0.5	<0.5	4.1	24
W-568	11-Aug-08	E601	<0.5	6.4	<0.5	<0.5	<0.5	<1	1.4	<0.5	<0.5	2.8	14
W-568	17-Feb-09	E601	<0.5	7.8	<0.5	<0.5	<0.5	<1	2.6	0.59	<0.5	3.7	29
W-1110	29-Jan-08	E601	<0.5	4	<0.5	<0.5	1.6	<1	5.5	<0.5	<0.5	10	<0.5
W-1110	17-Feb-09	E601	<0.5	4.7	<0.5	<0.5	1.8	<1	4.9	<0.5	<0.5	10	<0.5
W-1704	08-Feb-07	E601	<0.5	23	<0.5	<0.5	1.7	<1	<0.5	<0.5	<0.5	10	12
W-1704	22-Oct-08	E601	<0.5	23	<0.5	<0.5	1.5	<1	<0.5	<0.5	<0.5	12	8.3
W-1704	17-Feb-09	E601	<0.5	24	<0.5	<0.5	1.7	<1	<0.5	<0.5	<0.5	11	6.4
SIP-501-202	23-Apr-07	E601	<0.5	3.2	<0.5	<0.5	0.8	<1	39	2.6	<0.5	14	1.1
SIP-501-202	18-Feb-09	E601	<0.5	2.4	<0.5	<0.5	0.65	<1	34	2.3	<0.5	12	0.76
TFD													
Extraction Wells^b													
W-351	03-Apr-08	E601	5.3	1.1	<0.5	0.99	3.9	<1	1.2	5.4	<0.5	99	1.3
W-351	16-Mar-09	E601	5.5	1.1	<0.5	<0.5	2.5	<1	1.2	2.9	<0.5	120	<0.5
W-351	08-Apr-09	E601	5.3	1.3	<0.5	<0.5	1.6	<1	1.2	2.4	<0.5	120	0.83
W-906	03-Apr-08	E601	0.81	1.6	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.4	1.9
W-906	16-Mar-09	E601	<0.5	1.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	4	0.74
W-906	08-Apr-09	E601	<0.5	0.96	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.7	0.62

Addendum. VOC analyses for nearby monitor wells and extraction wells associated with treatment facilities restarted during the 2nd quarter of 2009.

Sample Station	Date Sampled	Analytic Method ^a	CCl4	CHCl3	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE	Freon 113	PCE	1,1,1-TCA	TCE	Freon 11
			<-	-	-	-	-	-	-	-	-	-	->
TFD (cont.)													
Extraction Wells^b													
W-907-2	03-Apr-08	E601	0.95	2	<0.5	<0.5	0.8	<1	<0.5	0.89	<0.5	23	<0.5
W-907-2	07-Jul-08	E601	0.99	3.2	<0.5	<0.5	1.3	<1	<0.5	1.7	<0.5	29	<0.5
W-907-2	16-Mar-09	E601	0.59	5	<0.5	<0.5	3.2	<1	1.2	5.3	<0.5	67	<0.5
W-907-2	08-Apr-09	E601	<0.5	7.2	<0.5	0.6	4.2	<1	1.6	7.8	<0.5	92	<0.5
W-1206	16-Jan-08	E601	1	1.4	<0.5	<0.5	0.61	<1	<0.5	0.5	<0.5	20	<0.5
W-1206	07-Jul-08	E601	0.87	1.6	<0.5	<0.5	0.66	<1	<0.5	0.52	<0.5	19	<0.5
W-1206	16-Mar-09	E601	0.59	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	13	4
W-1206	08-Apr-09	E601	0.61	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	13	5.7
W-1208	03-Apr-08	E601	3	2.1	<0.5	<0.5	<0.5	<1	0.64	0.72	<0.5	63	57
W-1208	07-Jul-08	E601	3.1	2.2	<0.5	<0.5	0.6	<1	0.63	0.93	<0.5	64	53
W-1208	16-Mar-09	E601	2.1	2.4	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	38	79
W-1208	08-Apr-09	E601	2.1	2.3	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	40	81
Monitor Wells^b													
W-311	14-Jan-08	E601	<0.5	4.6	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	8.9	20
W-311	11-Feb-09	E601	<0.5	3.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	9.7	16
W-355	03-Jan-08	E601	1.1	1.6	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	13	35
W-355	11-Nov-08	E601	1.2	1.6	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	8.1	22
W-355	09-Mar-09	E601	0.98	1.6	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	5.2	7.7
W-369	14-Jan-08	E601	<0.5	6.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	7.8	26
W-369	28-Jan-09	E601	<0.5	5.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	5.5	41
W-1401	18-Feb-09	E601	1.1	2.2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	8.9	49
W-1401	07-Apr-09	E601	1.2	2.1	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	8.6	47
W-1803-1	30-Apr-08	E601	<0.5	1.4	<0.5	<0.5	1.2	<1	<0.5	1.5	<0.5	22	<0.5
W-1803-1	04-Sep-08	E601	<0.5	1.9	<0.5	<0.5	1.5	<1	0.52	1.9	<0.5	28	<0.5
W-1803-1	09-Oct-08	E601	<0.5	1.8	<0.5	<0.5	1.4	<1	<0.5	1.5	<0.5	24	<0.5
W-1803-1	09-Mar-09	E601	0.52	4.7	<0.5	0.57	3.4	<1	1.2	3.7	<0.5	56	<0.5
W-1803-2	30-Jan-08	E601	<0.5	1.4	<0.5	<0.5	0.95	<1	<0.5	1.2	<0.5	19	<0.5
W-1803-2	04-Sep-08	E601	<0.5	1.8	<0.5	<0.5	1.2	<1	<0.5	1.5	<0.5	25	<0.5
W-1803-2	09-Oct-08	E601	<0.5	1.8	<0.5	<0.5	1.3	<1	<0.5	1.4	<0.5	25	<0.5
W-1803-2	09-Mar-09	E601	<0.5	5.1	<0.5	<0.5	3.1	<1	1.2	2.8	<0.5	53	<0.5
W-2103	30-Aug-07	E601	15	3	<0.5	<0.5	0.81	<1	5	0.72	<0.5	370	<0.5
W-2103	16-Sep-08	E601	10	2	<0.5	<0.5	0.92	<1	5.3	0.54	<0.5	210	<0.5

Addendum. VOC analyses for nearby monitor wells and extraction wells associated with treatment facilities restarted during the 2nd quarter of 2009.

Sample Station	Date Sampled	Analytic Method ^a	CCl4 <-	CHCl3 -	1,1-DCA -	1,2-DCA -	1,1-DCE -	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFD (cont.)													
Monitor Wells^c													
W-2103	13-Oct-08	E601	10	2	<0.5	<0.5	0.86	<1	4.1	0.54	<0.5	220	<0.5
W-2103	21-Jan-09	E601	9.2	1.6	<0.5	<0.5	0.58	<1	3.6	<0.5	<0.5	220	<0.5
TFD-S													
Extraction Wells^b													
W-1503	25-Apr-08	E601	2.1	1.5	<0.5	<0.5	3.5	<1	1	2.1	<0.5	80	<0.5
W-1503	22-Jul-08	E601	4.7	1.9	<0.5	<0.5	10	<1	2	3.8	<0.5	190	0.9
W-1503	21-Nov-08	E601	9.3	2.6	0.87	0.59	23	<1	3.7	7.6	<0.5	440	2.1
W-1503	29-Jan-09	E601	10	3.3	1.1	0.68	34	<1	4.6	11	<0.5	550	2.4
W-1503	06-Apr-09	E601	11	3.5	0.97	0.74	26	<1	3.8	11	<0.5	550	2.2
W-1503	16-Apr-09	E601	8.6	3.5	0.85	0.68	22	<1	3.4	9.6	<0.5	450	1.7
W-1503	19-May-09	E601	10	4.4	1.1	0.85	30	<1	5.1	15	<0.5	630	2.4
W-1503	22-May-09	E601	8.6	3.6	0.85	0.72	23	<1	4.1	11	<0.5	440	1.8
W-1503	27-May-09	E601	7.5	3.6	0.72	0.73	20	<1	3.6	8.7	<0.5	370	1.8
W-1503	29-May-09	E601	7.2	3.3	0.69	0.64	18	<1	3.2	9.7	<0.5	400	1.5
W-1503	05-Jun-09	E601	8.3	3.8	0.77	0.75	21	<1	3.7	11	<0.5	460	1.8
W-1503	09-Jun-09	E601	7.3	3.4	0.61	0.59	17	<1	3.2	10	<0.5	350	1.5
W-1503	16-Jun-09	E601	6.6	3.3	0.51	0.59	14	<1	2.9	9.5	<0.5	290	1.3
W-1504	25-Apr-08	E601	<0.5	<0.5	<0.5	<0.5	14	<1	2.9	20	<0.5	100	<0.5
W-1504	22-Jul-08	E601	<0.5	<0.5	<0.5	<0.5	14	<1	3.8	22	<0.5	79	<0.5
W-1504	21-Nov-08	E601	<0.5	<0.5	<0.5	<0.5	14	<1	4.1	22	<0.5	100	<0.5
W-1504	29-Jan-09	E601	<0.5	<0.5	<0.5	<0.5	17	<1	3.9	22	<0.5	100	<0.5
W-1504	06-Apr-09	E601	<0.5	<0.5	<0.5	<0.5	11	<1	2.6	19	<0.5	87	<0.5
W-1504	16-Jun-09	E601	<0.5	<0.5	<0.5	<0.5	10	<1	2.6	21	<0.5	82	<0.5
W-1510	25-Apr-08	E601	<0.5	<0.5	<0.5	<0.5	3.8	<1	0.91	5.6	<0.5	38	<0.5
W-1510	22-Jul-08	E601	<0.5	<0.5	<0.5	<0.5	1.7	<1	0.5	3.7	<0.5	23	<0.5
W-1510	21-Nov-08	E601	<0.5	<0.5	<0.5	<0.5	0.87	<1	<0.5	1.5	<0.5	16	<0.5
W-1510	29-Jan-09	E601	<0.5	<0.5	<0.5	<0.5	1.3	<1	<0.5	1.5	<0.5	18	<0.5
W-1510	06-Apr-09	E601	<0.5	<0.5	<0.5	<0.5	1.4	<1	<0.5	2.8	<0.5	22	<0.5
W-1510	16-Jun-09	E601	<0.5	<0.5	<0.5	<0.5	1.4	<1	<0.5	3.2	<0.5	22	<0.5
Monitor Wells^c													
W-277	12-Apr-07	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3	<0.5
W-277	23-Feb-09	E601	<0.5	0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	4.7	<0.5
W-1202	09-May-07	E601	<0.5	<0.5	<0.5	<0.5	4.5	<1	<0.5	9.4	<0.5	73	<0.5
W-1202	06-Aug-08	E601	<0.5	0.52	<0.5	<0.5	4	<1	0.71	9.8	<0.5	69	<0.5
W-1202	23-Feb-09	E601	<0.5	<0.5	<0.5	<0.5	4.3	<1	<0.5	9.6	<0.5	67	<0.5
W-1417	03-Jan-08	E601	<0.5	0.71	<0.5	<0.5	3	<1	<0.5	1.9	<0.5	42	<0.5
W-1417	23-Feb-09	E601	<0.5	0.71	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	2.5	<0.5

Addendum. VOC analyses for nearby monitor wells and extraction wells associated with treatment facilities restarted during the 2nd quarter of 2009.

Sample Station	Date Sampled	Analytic Method ^a	CCl4	CHCl3	1,1-DCA	1,2-DCA	1,1-DCE	1,2-DCE	Freon 113	PCE	1,1,1-TCA	TCE	Freon 11
			<-	-	-	-	-	-	-	-	-	-	->
TFD-S (cont.)													
Monitor Wells^c													
W-1418	26-Apr-07	E601	<0.5	1.8	<0.5	<0.5	7.5	3.3	2.3	8.6	<0.5	77	<0.5
W-1418	07-Aug-08	E601	<0.5	2.3	<0.5	<0.5	9.3	2.4	2.4	8.7	<0.5	84	<0.5
W-1418	23-Feb-09	E601	<0.5	2.9	<0.5	0.53	12	2.2	3	13	<0.5	100	<0.5
W-1419	03-Jan-08	E601	<0.5	<0.5	<0.5	<0.5	0.51	<1	<0.5	<0.5	<0.5	6.7	<0.5
W-1419	23-Feb-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	2.8	<0.5
W-1421	03-Jan-08	E601	<0.5	0.65	<0.5	<0.5	2.7	<1	<0.5	2.2	<0.5	40	<0.5
W-1421	23-Feb-09	E601	<0.5	0.51	<0.5	<0.5	1.9	<1	<0.5	1.6	<0.5	27	<0.5
W-1422	07-Nov-07	E601	<0.5	1.8	<0.5	<0.5	11	3.1	4	8.5	<0.5	91	<0.5
W-1422	18-Aug-08	E601	<0.5	<0.5	<0.5	<0.5	2.3	<1	<0.5	2.7	<0.5	18	<0.5
W-1422	23-Feb-09	E601	<0.5	0.57	<0.5	<0.5	10	<1	2	7.9	<0.5	53	<0.5
W-1422	14-May-09	E601	<0.5	1.3	<0.5	<0.5	12	<1	3	12	<0.5	76	<0.5
TFE-SE													
Extraction Wells^b													
W-359	09-Jan-08	E601	4.1	0.69	<0.5	<0.5	10	<1	9.3	8.7	<0.5	100	0.91
W-359	19-Mar-09	E601	0.86	<0.5	<0.5	<0.5	6.4	<1	12	2.4	<0.5	44	<0.5
W-359	19-May-09	E601	1.2	<0.5	<0.5	<0.5	6.4	<1	13	2.9	<0.5	51	<0.5
W-359	16-Jun-09	E601	3.7	0.5	<0.5	<0.5	9.1	<1	12	8.5	<0.5	100	0.86
Monitor Wells^c													
W-257	24-Oct-07	E601	<0.5	<0.5	<0.5	<0.5	12	<1	4.1	12	<0.5	19	<0.5
W-257	07-May-08	E601	<0.5	<0.5	<0.5	<0.5	50	<1	11	39	<0.5	71	<0.5
W-257	08-Sep-08	E601	<0.5	<0.5	<0.5	<0.5	29	<1	3.6	41	<0.5	94	<0.5
W-257	13-Oct-08	E601	<0.5	<0.5	<0.5	<0.5	37	<1	4.4	39	<0.5	92	<0.5
W-257	10-Feb-09	E601	<0.5	<0.5	<0.5	<0.5	39	<1	5.6	35	<0.5	77	<0.5
W-257	02-Apr-09	E601	<0.5	<0.5	<0.5	<0.5	35	<1	5.6	41	<0.5	81	<0.5
W-274	26-Sep-07	E601	0.54	0.84	<0.5	<0.5	<0.5	<1	<0.5	1.8	<0.5	54	<0.5
W-274	18-Mar-09	E601	1.1	1.2	<0.5	<0.5	<0.5	<1	<0.5	3.1	<0.5	78	1.4
W-1507	07-Nov-07	E601	<0.5	0.79	<0.5	<0.5	0.95	<1	<0.5	<0.5	<0.5	25	<0.5
W-1507	28-Apr-08	E601	0.6	0.76	<0.5	<0.5	1.1	<1	<0.5	<0.5	<0.5	30	<0.5
W-1507	18-Aug-08	E601	2	3.2	<0.5	<0.5	3.5	2.7	<0.5	1.3	<0.5	110	<0.5
W-1507	17-Nov-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	4.6	<0.5
W-1507	26-Jan-09	E601	2.2	3.3	<0.5	<0.5	3.8	2.6	<0.5	1.3	<0.5	120	<0.5
W-1507	01-Apr-09	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	4.2	<0.5

Addendum. VOC analyses for nearby monitor wells and extraction wells associated with treatment facilities restarted during the 2nd quarter of 2009.

Sample Station	Date Sampled	Analytic Method ^a	CCl4 <-	CHCl3 -	1,1-DCA -	1,2-DCA -	1,1-DCE -	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
TFE-SE (cont.)													
Monitor Wells^c													
W-1517	26-Sep-07	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	0.86	<0.5	37	<0.5
W-1517	16-Mar-09	E601	0.88	1.4	<0.5	<0.5	0.55	<1	<0.5	3.2	<0.5	43	0.77
TF406-NW													
Extraction Wells^b													
W-1801	28-Apr-08	E601	<0.5	2.3	<0.5	<0.5	<0.5	<1	5.4	0.74	<0.5	23	<0.5
W-1801	06-May-09	E601	<0.5	2	<0.5	<0.5	<0.5	<1	2.9	0.51	<0.5	19	<0.5
W-1801	21-May-09	E601	<0.5	2.1	<0.5	<0.5	<0.5	<1	4	0.72	<0.5	19	<0.5
W-1801	30-Jun-09	E601	<0.5	2	<0.5	<0.5	<0.5	<1	9.8	0.81	<0.5	36	<0.5
Monitor Wells^c													
SIP-ETS-402	25-Apr-07	E601	2	<0.5	<0.5	<0.5	14	<1	11	4.9	<0.5	19	<0.5
SIP-ETS-402	29-Apr-09	E601	1.2	<0.5	<0.5	<0.5	10	<1	9.7	4.7	<0.5	22	<0.5
TF5475-2													
Extraction Wells^b													
W-1108	16-Jan-08	E601	2	39	0.79	3.1	18	<1	5.9	45	<0.5	440	<0.5
W-1108	08-May-09	E601	2.3	42	0.98	4.4	25	21	7.5	62	<0.5	640	<0.5
W-1415	16-Jan-08	E601	0.71	3.9	<0.5	<0.5	8.4	<1	2.1	9.8	<0.5	76	<0.5
W-1415	12-May-09	E601	0.63	5.4	<0.5	<0.5	9	<1	2.3	8	<0.5	65	<0.5
Monitor Wells^c													
W-909	07-Nov-07	E601	<0.5	0.99	<0.5	<0.5	49	<1	16	40	<0.5	66	<0.5
W-909	28-Feb-08	E601	<0.5	0.93	<0.5	<0.5	52	<1	16	56	<0.5	98	<0.5
W-909	07-May-08	E601	<0.5	1	<0.5	<0.5	52	<1	15	50	<0.5	85	<0.5
W-909	08-Sep-08	E601	<0.5	<0.5	<0.5	<0.5	4.7	<1	<0.5	11	<0.5	24	<0.5
W-909	16-Oct-08	E601	<0.5	<0.5	<0.5	<0.5	5.1	<1	<0.5	14	<0.5	27	<0.5
W-909	25-Feb-09	E601	<0.5	<0.5	<0.5	<0.5	8.6	<1	<0.5	16	<0.5	33	<0.5
W-909	02-Apr-09	E601	<0.5	<0.5	<0.5	<0.5	8.2	<1	<0.5	18	<0.5	36	<0.5
W-912	29-Aug-07	E601	1.8	20	0.61	2.1	15	<1	7	27	<0.5	240	<0.5
W-912	28-Feb-08	E601	1.4	19	0.52	2	12	<1	5.3	25	<0.5	230	<0.5
W-912	07-May-08	E601	0.85	11	<0.5	1.1	7.7	<1	3.5	14	<0.5	140	<0.5
W-912	28-Aug-08	E601	1.7	22	0.55	2.2	14	<1	5.8	30	<0.5	260	<0.5
W-912	21-Oct-08	E601	1.6	20	<0.5	2.1	12	<1	5.2	29	<0.5	260	<0.5
W-912	05-Feb-09	E601	1.5	21	0.58	1.9	15	<1	6	26	<0.5	260	<0.5
W-912	02-Apr-09	E601	1	15	<0.5	1.5	9.3	<1	4.8	18	<0.5	200	<0.5
W-1203	07-Nov-07	E601	1.8	0.75	<0.5	<0.5	1.2	<1	11	1.1	<0.5	130	<0.5
W-1203	07-May-08	E601	1.8	0.65	<0.5	<0.5	0.98	<1	8.6	1.1	<0.5	140	<0.5
W-1203	02-Apr-09	E601	0.57	<0.5	<0.5	<0.5	3.6	<1	17	0.71	<0.5	30	<0.5

Addendum. VOC analyses for nearby monitor wells and extraction wells associated with treatment facilities restarted during the 2nd quarter of 2009.

Sample Station	Date Sampled	Analytic Method ^a	CCl4 <-	CHCl3 -	1,1-DCA -	1,2-DCA -	1,1-DCE -	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
VTF511													
Extraction Wells^b													
W-2204	01-Aug-07	TO15DIT	0.89	0.069	<0.02	0.091	0.039	<0.02	<0.02	0.26	<0.02	3.4	<0.02
W-2204	21-May-09	TO15DIT	0.098	0.034	<0.005	0.038	0.019	<0.005	0.0082	0.42	<0.005	3.9	<0.005
W-2205	01-Aug-07	TO15DIT	0.087	0.14	<0.031	0.035	0.056	<0.031	<0.031	0.19	<0.031	5.5	<0.031
W-2205	21-May-09	TO15DIT	0.18	0.033	<0.005	0.0052	0.045	<0.005	0.0078	0.23	<0.005	3.6	0.012
W-2206	01-Aug-07	TO15DIT	0.024	0.057	<0.02	0.25	<0.02	<0.02	<0.02	0.27	<0.02	2.9	<0.02
W-2206	21-May-09	TO15DIT	0.013	0.022	<0.005	0.024	<0.005	<0.005	<0.005	0.24	<0.005	2	<0.005
W-2207A	26-Feb-08	TO15DIT	<0.005	<0.005	<0.005	<0.005	0.0066	<0.005	<0.005	0.0064	<0.005	1.9	<0.005
W-2207A	14-May-09	TO15DIT	<0.005	0.0055	<0.005	<0.005	0.0053	<0.005	<0.005	0.01	<0.005	1.5	<0.005
W-2207B	07-Aug-08	TO15DIT	0.032	0.023	<0.0062	<0.0062	0.083	<0.0062	<0.0062	0.044	<0.0062	4.2	<0.0062
W-2207B	14-May-09	TO15DIT	0.029	0.068	<0.02	<0.02	0.054	<0.02	<0.02	0.063	<0.02	17	<0.02
W-2207B	10-Jun-09	TO15DIT	0.024	0.056	<0.012	<0.012	0.023	<0.012	<0.012	0.045	<0.012	11	<0.012
W-2207B	18-Jun-09	TO15DIT	0.033	0.027	<0.0084	<0.0084	0.11	<0.0084	<0.0084	0.058	<0.0084	8.2	0.011
W-2208A	26-Feb-08	TO15DIT	0.18	0.047	<0.02	<0.02	0.37	<0.02	0.032	0.11	<0.02	15	0.75
W-2208A	14-May-09	TO15DIT	0.025	0.016	<0.01	<0.01	0.05	<0.01	<0.01	0.019	<0.01	9.8	0.026
W-2208B	07-Aug-08	TO15DIT	0.56	0.18	0.17	<0.072	3.6	0.11	0.19	1.8	<0.072	58	0.19
W-2208B	14-May-09	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0058	<0.005	0.23	<0.005
W-2208B	10-Jun-09	TO15DIT	0.67	0.16	<0.1	<0.1	4.2	<0.1	0.31	0.6	<0.1	85	0.31
W-2208B	18-Jun-09	TO15DIT	1.1	0.26	0.22	<0.12	6.2	0.16	0.35	1.7	<0.12	97	0.32
Monitor Wells^c													
SIP-PA-016	14-May-09	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.0073	<0.005	0.023	<0.005

Notes on the following page.

Addendum. VOC analyses for nearby monitor wells and extraction wells associated with treatment facilities restarted during the 2nd quarter of 2009.

^a EPA Method 601 and TO15DIT analytical methods were used to determine VOCs in ground water (ppb) and soil vapor (ppm [v/v]), respectively.

^b Extraction well analytical results.

^c Monitor well analytical results.

Notes:

CCl₄ = Carbon tetrachloride

CHCl₃ = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

Attachment B

Self-Monitoring Reports

Self-Monitoring Report

LLNL Treatment Facility A (TFA)

AREA TFA

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): **730**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **04-09-2009**

Influent pH: **7.5**

Effluent pH: **7.5**

Effluent Temperature (°C): **18.2**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-408	1,083,400	24.4
W-109	1,323,400	30.2
W-457	849,500	25.0
W-522	0	0.0
W-614	507,300	11.4
W-712	367,900	8.3
W-714	327,100	7.6
W-904	850,600	20.2
W-415	1,680,200	38.4
W-518	0	0.0
W-903	0	0.0
W-605	436,000	9.9
W-262	0	0.0
W-1004	502,200	11.3
W-1009	361,700	24.0
W-1001	165,800	3.8
<hr/>		
Total:	<u>8,455,100</u>	<u>214.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>4,227,550</u>

Self-Monitoring Report (cont'd)
LLNL Treatment Facility A (TFA)
AREA TFA

Arroyo Seco

TFG-ASW

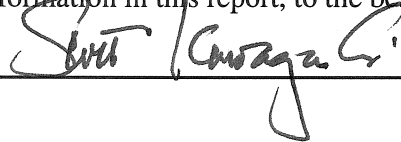
4,227,550

6. Comments:

W-1009 down on 4-17-09 due to pump failure. W-457 down on 4-24-09 due to transducer failure.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _____



Date: 04-30-2009

Self-Monitoring Report

LLNL Treatment Facility A (TFA)

AREA TFA

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29**

Total monthly time facility operated (hours): **687**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **05-04-2009**

Influent pH: **7.0**

Effluent pH: **7.5**

Effluent Temperature (°C): **19.5**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-408	1,078,700	26.7
W-109	1,281,900	31.6
W-457	198,000	10.0
W-522	0	0.0
W-614	502,300	11.9
W-712	348,100	8.8
W-714	393,600	7.5
W-904	740,700	20.0
W-415	1,590,700	38.4
W-518	0	0.0
W-903	0	0.0
W-605	425,300	10.3
W-262	0	0.0
W-1004	481,500	12.1
W-1009	0	0.0
W-1001	161,000	3.9
<hr/>		
Total:	<u>7,201,800</u>	<u>181.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>3,600,900</u>

Self-Monitoring Report (cont'd)
LLNL Treatment Facility A (TFA)
AREA TFA

Arroyo Seco

TFG-ASW

3,600,900

6. Comments:

W-457 was started on 5-12-09. Facility went down on 5-28-09 due to an I/O fault.

7. I certify that the information in this report to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-29-2009

Self-Monitoring Report

LLNL Treatment Facility A (TFA)

AREA TFA

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	30	31															
June	01	02	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>		
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	28	<u>29</u>	<u>30</u>		

Total monthly time facility operated (hours): 619

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-03-2009</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>19.3</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-408	989,300	26.9
W-109	1,167,200	31.9
W-457	235,600	7.5
W-522	0	0.0
W-614	461,500	12.6
W-712	315,000	9.0
W-714	393,800	10.4
W-904	577,500	16.1
W-415	1,476,800	40.0
W-518	0	0.0
W-903	0	0.0
W-605	387,500	10.4
W-262	0	0.0
W-1004	434,000	11.7
W-1009	0	0.0
W-1001	145,800	3.6
Total:	<u>6,584,000</u>	<u>180.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>3,292,000</u>

Self-Monitoring Report (cont'd)
LLNL Treatment Facility A (TFA)
AREA TFA

Arroyo Seco

TFG-ASW

3,292,000

6. Comments:

Digital board replaced and facility restarted on 6-3-09. Facility down on 6-27-09 due to low air flow. Facility restarted on 6-29-09.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _____

Scott Kavaguchi

Date: 07-01-2009

Self-Monitoring Report
LLNL Solar Treatment Unit 06 (STU06)
AREA TFA-E

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30**

Total monthly time facility operated (hours): 432

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 04-03-2009
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 19.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-254	73,851	2.9
Total:	<u>73,851</u>	<u>2.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>73,851</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Karagum Date: 04-30-2009

Self-Monitoring Report
LLNL Solar Treatment Unit 06 (STU06)
AREA TFA-E

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29**

Total monthly time facility operated (hours): **408**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **05-05-2009**
Influent pH: **7.0**
Effluent pH: **7.0**
Effluent Temperature (°C): **19.4**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-254	69,776	2.9
Total:	<u>69,776</u>	<u>2.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>69,776</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **05-29-2009**

Self-Monitoring Report
LLNL Solar Treatment Unit 06 (STU06)
AREA TFA-E

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	<u>30</u>	<u>31</u>															
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	10	11	12	13	14	15		
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>		

Total monthly time facility operated (hours): 281

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-01-2009</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>17.1</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-254	47,068	2.8
Total:	<u>47,068</u>	<u>2.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>47,068</u>

6. Comments:

Facility down on 6-10-09 due to pump motor speed controller malfunction. Speed controller replaced and facility restarted on 6-16-09.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kargunski Date: 06-30-2009

Self-Monitoring Report

LLNL Treatment Facility B (TFB)

AREA TFB

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 728

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>04-09-2009</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>18.2</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-357	250,700	5.8
W-621	306,500	7.3
W-620	0	0.0
W-610	307,900	6.7
W-704	756,100	17.7
W-655	317,600	6.3
W-1423	296,400	5.7
Total:	<u>2,235,200</u>	<u>49.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>2,235,200</u>

6. Comments:

End of wet season. Ion exchange columns removed from service on 4-1-09.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott K. Caragana Date: 04-30-2009

**Land Observation Report date:
TFB-R002 - West Perimeter Drainage Channel**

1. Reporting Period: Business Month April Year 2009

2. Date compliance sampling performed 04-09-2009

3. Weather Conditions:

Average air tempertaure (°C):	<u>12.3</u>
6-day total precipitation (in):	<u>.34</u>
Average wind speed/direction (mph):	<u>4/ SSE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawaguchi Date: 04-30-2009

Self-Monitoring Report
LLNL Treatment Facility B (TFB)
AREA TFB

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29**

Total monthly time facility operated (hours): **684**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **05-04-2009**
Influent pH: **7.5**
Effluent pH: **7.5**
Effluent Temperature (°C): **20.2**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-357	226,800	5.7
W-621	304,700	6.8
W-620	189,700	5.5
W-610	261,100	7.0
W-704	711,600	17.3
W-655	345,300	7.4
W-1423	276,600	6.8
Total:	<u>2,315,800</u>	<u>56.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>2,315,800</u>

6. Comments:

W-620 was started on 5-7-09.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **05-29-2009**

**Land Observation Report date:
TFB-R002 - West Perimeter Drainage Channel**

1. Reporting Period: Business Month May Year 2009

2. Date compliance sampling performed 05-04-2009

3. Weather Conditions:

Average air tempertaure (°C):	<u>13.7</u>
6-day total precipitation (in):	<u>.33</u>
Average wind speed/direction (mph):	<u>5/ SSW</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Kewagon G. Date: 05-29-2009

Self-Monitoring Report
LLNL Treatment Facility B (TFB)
AREA TFB

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	<u>30</u>	<u>31</u>																	
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>				
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>				

Total monthly time facility operated (hours): 780

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-02-2009</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>20.6</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-357	263,200	6.2
W-621	346,000	7.3
W-620	265,700	5.8
W-610	288,800	6.2
W-704	824,200	17.8
W-655	407,700	9.6
W-1423	292,200	6.5
Total:	<u>2,687,800</u>	<u>59.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>2,687,800</u>

6. Comments:

7. I certify that the information in this report to the best of my knowledge, is true and correct.

Operator Signature: Scott Kavanagh Date: 07-02-2009

**Land Observation Report date:
TFB-R002 - West Perimeter Drainage Channel**

1. Reporting Period: Business Month June Year 2009

2. Date compliance sampling performed 06-02-2009

3. Weather Conditions:

Average air tempertaure (°C):	<u>16.4</u>
6-day total precipitation (in):	<u>0</u>
Average wind speed/direction (mph):	<u>7/ WSW</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawaguchi Date: 07-02-2009

**Self-Monitoring Report
LLNL Treatment Facility C (TFC)
AREA TFC**

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30**

Total monthly time facility operated (hours): **719**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **04-06-2009**
Influent pH: **7.0**
Effluent pH: **7.5**
Effluent Temperature (°C): **19.8**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-701	578,811	13.5
W-1015	161,237	7.4
W-1116	72,201	1.6
W-1103	154,996	3.9
W-1102	115,688	3.9
W-1104	1,199,281	28.2
Total:	<u>2,282,214</u>	<u>58.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>2,282,214</u>

6. Comments:

End of wet season. Removed ion exchange columns from service on 4-1-09.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-30-2009**

**Land Observation Report date:
TFC-R003 - Arroyo Las Positas**

1. Reporting Period: Business Month April Year 2009

2. Date compliance sampling performed 04-06-2009

3. Weather Conditions:

Average air tempertaure (°C):	<u>12.3</u>
6-day total precipitation (in):	<u>0</u>
Average wind speed/direction (mph):	<u>6/ SSE</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-30-2009

Self-Monitoring Report
LLNL Treatment Facility C (TFC)
AREA TFC

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29**

Total monthly time facility operated (hours): **696**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **05-04-2009**

Influent pH: **7.0**

Effluent pH: **7.5**

Effluent Temperature (°C): **19.9**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-701	559,411	13.2
W-1015	206,186	7.5
W-1116	67,226	1.7
W-1103	155,331	3.7
W-1102	77,827	3.9
W-1104	1,156,425	27.5
Total:	<u>2,222,406</u>	<u>57.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>2,222,406</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **05-29-2009**

**Land Observation Report date:
TFC-R003 - Arroyo Las Positas**

1. Reporting Period: Business Month May Year 2009

2. Date compliance sampling performed 05-04-2009

3. Weather Conditions:

Average air tempertaure (°C):	<u>13.7</u>
6-day total precipitation (in):	<u>.33</u>
Average wind speed/direction (mph):	<u>5/ SSW</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-29-2009

Self-Monitoring Report

LLNL Treatment Facility C (TFC)

AREA TFC

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	<u>30</u>	<u>31</u>																	
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>				
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>				

Total monthly time facility operated (hours): 751

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 06-02-2009
 Influent pH: 7.5
 Effluent pH: 7.5
 Effluent Temperature (°C): 20.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-701	599,545	13.4
W-1015	200,998	6.8
W-1116	79,098	1.7
W-1103	170,904	4.2
W-1102	137,510	3.5
W-1104	1,254,837	27.6
Total:	<u>2,442,892</u>	<u>57.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>2,442,892</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawaguchi Date: 06-30-2009

**Land Observation Report date:
TFC-R003 - Arroyo Las Positas**

1. Reporting Period: Business Month June Year 2009

2. Date compliance sampling performed 06-02-2009

3. Weather Conditions:

Average air tempertaure (°C):	<u>16.4</u>
6-day total precipitation (in):	<u>0</u>
Average wind speed/direction (mph):	<u>7/ WSW</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-30-2009

Self-Monitoring Report
LLNL Mini Treatment Unit 1 (MTU1)
AREA TFC-E

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April	<u>01</u>	<u>02</u>	03	04	05	<u>06</u>	<u>07</u>	<u>08</u>	09	10	11	12	13	14	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	25	26	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 347

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>04-01-2009</u>
Influent pH:	<u>6.5</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>19.8</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-413	244,920	0.0
W-368	6,858	2.0
Total:	<u>251,778</u>	<u>2.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>251,778</u>

6. Comments:

As part of REVAL re-activation, the facility remedial well field was undergoing hydraulic testing during the month of April.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-30-2009**

Self-Monitoring Report
LLNL Mini Treatment Unit 1 (MTU1)
AREA TFC-E

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 642

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 05-06-2009
Influent pH: 6.5
Effluent pH: 7.5
Effluent Temperature (°C): 19.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-413	409,449	0.0
W-368	164,244	6.2
Total:	<u>573,693</u>	<u>6.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>573,693</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-01-2009

Self-Monitoring Report
LLNL Mini Treatment Unit 1 (MTU1)
AREA TFC-E

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	<u>30</u>	<u>31</u>																	
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>				
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>				

Total monthly time facility operated (hours): 762

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-03-2009</u>
Influent pH:	<u>6.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>19.9</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-413	781,651	17.5
W-368	236,869	5.0
Total:	<u>1,018,520</u>	<u>22.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,018,520</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-30-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 1 (PTU1)
AREA TFC-SE

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30**

Total monthly time facility operated (hours): **730**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **04-06-2009**

Influent pH: **7.5**

Effluent pH: **7.5**

Effluent Temperature (°C): **20.3**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1213	433,422	10.0
W-2201	535,163	12.4
Total:	<u>968,585</u>	<u>22.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>968,585</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-30-2009**

Self-Monitoring Report
LLNL Portable Treatment Unit 1 (PTU1)
AREA TFC-SE

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29**

Total monthly time facility operated (hours): **706**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **05-04-2009**

Influent pH: **7.5**

Effluent pH: **7.5**

Effluent Temperature (°C): **20.6**

4. Wellfield Data:

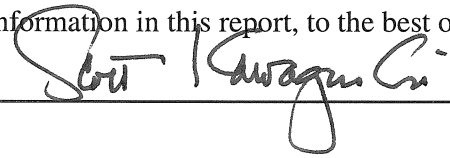
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1213	417,891	10.0
W-2201	518,044	12.5
Total:	<u>935,935</u>	<u>22.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>935,935</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **05-29-2009**

Self-Monitoring Report
LLNL Portable Treatment Unit 1 (PTU1)
AREA TFC-SE

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	<u>30</u>	<u>31</u>																	
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>				
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>				

Total monthly time facility operated (hours): 779

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-01-2009</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>20.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1213	460,356	10.0
W-2201	571,322	12.4
Total:	<u>1,031,678</u>	<u>22.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,031,678</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Kawaguchi Date: 06-30-2009

Self-Monitoring Report

LLNL Treatment Facility D (TFD)

AREA TFD

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April 01 02 03 04 05 06 07 **08** 09 10 11 12 13 14 **15**
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): **10**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **04-08-2009**
 Influent pH: **7.0**
 Effluent pH: **7.5**
 Effluent Temperature (°C): **20.5**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-906	3,700	10.0
W-907-2	600	12.1
W-351	1,400	3.7
W-653	0	0.0
W-1206	5,800	15.2
W-1208	9,500	25.0
W-2011	0	0.0
W-2101	0	0.0
W-2102	0	0.0
Total:	<u>21,000</u>	<u>66.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>21,000</u>

6. Comments:

Facility well flow/pressure test on 4-8-09. Begin business hours only operation on 4-15-09. Start interlock checks on 4-16-09.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **04-30-2009**

**Self-Monitoring Report
LLNL Treatment Facility D (TFD)
AREA TFD**

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-906	0	0.0
W-907-2	0	0.0
W-351	0	0.0
W-653	0	0.0
W-1206	0	0.0
W-1208	0	0.0
W-2011	0	0.0
W-2101	0	0.0
W-2102	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

Interlock checks continue.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Carver

Date: 06-01-2009

Self-Monitoring Report

LLNL Treatment Facility D (TFD)

AREA TFD

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	30	31																	
June	01	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	06	07	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	12	13	14	<u>15</u>				
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	27	28	29	<u>30</u>				

Total monthly time facility operated (hours): 342

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-02-2009</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>22.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-906	48,100	9.5
W-907-2	0	0.0
W-351	60,400	3.3
W-653	0	0.0
W-1206	79,700	14.9
W-1208	131,300	24.9
W-2011	0	0.0
W-2101	0	0.0
W-2102	0	0.0
Total:	<u>319,500</u>	<u>52.6</u>

5. Discharge Information:

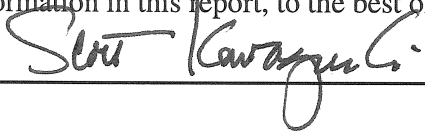
<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>319,500</u>

6. Comments:

Began day-only operations on 6-2-09 and continued through 6-5-09. Began 24-hour operations on 6-8-09 and continued through 6-11-09. Began extraction well field start-up procedure, pumping from W-351 on 6-15-09 and continued through 6-26-09. Began extraction well field start-up procedure, pumping from W-1206 on 6-30-09.

Self-Monitoring Report (cont'd)
LLNL Treatment Facility D (TFD)
AREA TFD

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-01-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 8 (PTU8)
AREA TFD-E

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 717

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 04-06-2009
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 23.4

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1253	0	0.0
W-1255	0	0.0
W-1550	96,200	2.3
W-1307	263,900	6.3
W-1301	58,800	1.2
W-1303	0	0.0
W-1306	10,000	0.3
W-1404	69,500	1.4
W-2006	0	0.0
W-2203	38,000	0.9
Total:	<u>536,400</u>	<u>12.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>536,400</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott L. Garza Date: 04-30-2009

Self-Monitoring Report

LLNL Portable Treatment Unit 8 (PTU8)

AREA TFD-E

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 653

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 05-05-2009
 Influent pH: 7.0
 Effluent pH: 7.5
 Effluent Temperature (°C): 21

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1253	0	0.0
W-1255	0	0.0
W-1550	92,400	2.4
W-1307	248,600	6.3
W-1301	55,400	1.2
W-1303	0	0.0
W-1306	10,500	0.3
W-1404	66,800	1.5
W-2006	0	0.0
W-2203	34,500	0.9
Total:	<u>508,200</u>	<u>12.6</u>

5. Discharge Information:

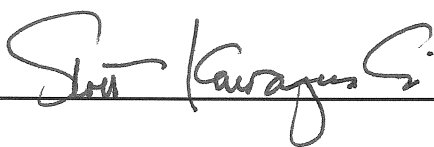
<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>508,200</u>

6. Comments:

System went down on 5-16-09 due to Snap I/O fault. Restarted system on 5-18-09. Facility cumulative hours meter does not appear to be functioning properly. Facility hours calculated from facility logbook.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Self-Monitoring Report (cont'd)
LLNL Portable Treatment Unit 8 (PTU8)
AREA TFD-E

Operator Signature:  Date: 06-05-2009

Self-Monitoring Report

LLNL Portable Treatment Unit 8 (PTU8)

AREA TFD-E

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	<u>30</u>	<u>31</u>															
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>		
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>		

Total monthly time facility operated (hours): 724

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-01-2009</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>19.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1253	0	0.0
W-1255	0	0.0
W-1550	102,400	2.3
W-1307	274,200	6.3
W-1301	62,000	1.3
W-1303	0	0.0
W-1306	12,300	0.3
W-1404	74,700	1.3
W-2006	0	0.0
W-2203	36,200	0.8
Total:	<u>561,800</u>	<u>12.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>561,800</u>

6. Comments:

Facility down on 6-3-09 due to low flow. Restart on 6-4-09. Facility down on 6-23-09 due to Snap I/O fault. Restarted on 6-24-09. Facility down on 6-29-09 due to Snap I/O fault. Restarted on 6-30-09. Facility hour accumulator readings unreliable. Facility hours estimated from facility logbook entries.

Self-Monitoring Report (cont'd)
LLNL Portable Treatment Unit 8 (PTU8)
AREA TFD-E

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-01-2009

Self-Monitoring Report

LLNL Portable Treatment Unit 10 (PTU10)

AREA TFD-HPD

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **Not Measured**

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1254	0	0.0
W-1653	0	0.0
W-1657	0	0.0
W-1551	0	0.0
W-1654	0	0.0
W-1656	0	0.0
W-1650	0	0.0
W-1652	0	0.0
W-1552	0	0.0
W-1651	0	0.0
W-1655	0	0.0
<hr/>		
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 10-11-07 for a bioremediation pilot test at this location. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

Self-Monitoring Report (cont'd)
LLNL Portable Treatment Unit 10 (PTU10)
AREA TFD-HPD

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kowagawa Date: 05-01-2009

Self-Monitoring Report

LLNL Portable Treatment Unit 10 (PTU10)

AREA TFD-HPD

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **Not Measured**

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1254	0	0.0
W-1653	0	0.0
W-1657	0	0.0
W-1551	0	0.0
W-1654	0	0.0
W-1656	0	0.0
W-1650	0	0.0
W-1652	0	0.0
W-1552	0	0.0
W-1651	0	0.0
W-1655	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 10-11-07 for a bioremediation pilot test at this location. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

Self-Monitoring Report (cont'd)
LLNL Portable Treatment Unit 10 (PTU10)
AREA TFD-HPD

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _____

Scott Kawaguchi

Date: 06-01-2009

Self-Monitoring Report

LLNL Portable Treatment Unit 10 (PTU10)

AREA TFD-HPD

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	30	31																												
June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **Not Measured**

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1254	0	0.0
W-1653	0	0.0
W-1657	0	0.0
W-1551	0	0.0
W-1654	0	0.0
W-1656	0	0.0
W-1650	0	0.0
W-1652	0	0.0
W-1552	0	0.0
W-1651	0	0.0
W-1655	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 10-11-07 for a bioremediation pilot test at this location. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and

Self-Monitoring Report (cont'd)
LLNL Portable Treatment Unit 10 (PTU10)
AREA TFD-HPD

resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-07-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 2 (PTU2)
AREA TFD-S

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 479

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 04-06-2009
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 23.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1503	332,648	13.7
W-1510	107,674	4.5
W-1504	154,961	6.0
Total:	<u>595,283</u>	<u>24.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>595,283</u>

6. Comments:

System down time for the month due to testing and verification repairs as well as hydraulic resting of the well field prior to implementation of the TFD-S Extraction Well Field Start Up Plan.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-01-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 2 (PTU2)
AREA TFD-S

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	

Total monthly time facility operated (hours): 554

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>05-08-2009</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>20.7</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1503	169,552	0.0
W-1510	52,026	4.1
W-1504	49,051	0.0
Total:	<u>270,629</u>	<u>4.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>270,629</u>

6. Comments:

System secure from 5/15/09 to 5/19/09 for well field recovery according to the TFD-S Extraction Well Field Start Up Plan.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-02-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 2 (PTU2)
AREA TFD-S

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	<u>30</u>	<u>31</u>																	
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>				
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>				

Total monthly time facility operated (hours): 687

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-05-2009</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>20.6</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1503	714,904	10.6
W-1510	120,554	3.1
W-1504	286,249	4.1
Total:	<u>1,121,707</u>	<u>17.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,121,707</u>

6. Comments:

System secure from 6/1/09 to 6/5/08 for well recovery and resting per TFD-S EWFSUP. W-1510 shutdown on 6/20/09 due to unknown cause, well secured.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-01-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 11 (PTU11)
AREA TFD-SE

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 594

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 04-03-2009
Influent pH: 7.0
Effluent pH: 7.5
Effluent Temperature (°C): 18.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-314	0	0.0
W-1403	0	0.0
W-1308	126,428	3.5
W-1904	0	0.0
W-2005	49,977	1.4
SIP-ETC-201	0	0.0
Total:	<u>176,405</u>	<u>4.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>176,405</u>

6. Comments:

Facility down on 4-10-09 due to low flow fault. Facility restarted on 4-14-09.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 04-30-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 11 (PTU11)
AREA TFD-SE

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29**

Total monthly time facility operated (hours): **640**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **05-05-2009**
Influent pH: **7.0**
Effluent pH: **7.5**
Effluent Temperature (°C): **20.7**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-314	0	0.0
W-1403	0	0.0
W-1308	136,003	3.6
W-1904	0	0.0
W-2005	52,759	1.3
SIP-ETC-201	0	0.0
Total:	<u>188,762</u>	<u>4.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>188,762</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **05-29-2009**

Self-Monitoring Report

LLNL Portable Treatment Unit 11 (PTU11)

AREA TFD-SE

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	<u>30</u>	<u>31</u>																		
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	07	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	14	<u>15</u>					
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>					

Total monthly time facility operated (hours): 606

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 06-01-2009
 Influent pH: 7.0
 Effluent pH: 7.5
 Effluent Temperature (°C): 19.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-314	0	0.0
W-1403	0	0.0
W-1308	120,546	3.6
W-1904	0	0.0
W-2005	53,277	1.3
SIP-ETC-201	0	0.0
<hr/>		
Total:	<u>173,823</u>	<u>4.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>173,823</u>

6. Comments:

Facility down intermittently due to low facility flow alarm caused by low water level in W-1308. W-1308 flow rate adjusted to 2.9 gpm on 6-22-09.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Kavanagh Date: 06-30-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 12 (PTU12)
AREA TFD-SS

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30**

Total monthly time facility operated (hours): **730**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **04-07-2009**
Influent pH: **7.5**
Effluent pH: **7.5**
Effluent Temperature (°C): **20.9**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1523	314,179	7.2
W-1603	7	0.0
W-1602	206,381	4.7
W-1601	50,851	1.1
Total:	<u>571,418</u>	<u>13.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>571,418</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **05-22-2009**

Self-Monitoring Report
LLNL Portable Treatment Unit 12 (PTU12)
AREA TFD-SS

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 699

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 05-20-2009
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 21.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1523	297,698	7.3
W-1603	0	0.0
W-1602	196,637	4.7
W-1601	48,764	1.1
Total:	<u>543,099</u>	<u>13.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>543,099</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-02-2009

Operator Signature: [Signature] Date: 07-01-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 6 (PTU6)
AREA TFD-W

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 424

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 04-07-2009
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 19.8

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1216	113,571	4.4
W-1215	0	0.0
W-1902	241,613	9.6
Total:	<u>355,184</u>	<u>14.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>355,184</u>

6. Comments:

System secure from 4/17/09 through 4/30/09 due to electronic interlock failure.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-22-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 6 (PTU6)
AREA TFD-W

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 **19** **20** **21** **22** **23** 24 25 **26** **27** **28** **29**

Total monthly time facility operated (hours): 168

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 05-20-2009
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 25.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1216	71,375	5.4
W-1215	2	0.0
W-1902	103,864	7.1
Total:	<u>175,241</u>	<u>12.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>175,241</u>

6. Comments:

System secure from 4/17/09 to 5/19/09 and 5/23/09 to 5/26/09 due to electronic trouble shooting and repair of transient leak alarm.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-02-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 6 (PTU6)
AREA TFD-W

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	30	31																								
June	01	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	07	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>											
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	21	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>											

Total monthly time facility operated (hours): 581

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 06-09-2009

Influent pH: 7.5

Effluent pH: 7.5

Effluent Temperature (°C): 23.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1216	264,628	7.7
W-1215	0	0.0
W-1902	373,378	11.5
Total:	<u>638,006</u>	<u>19.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>638,006</u>

6. Comments:

System secure 5/29/09 to 6/2/09, 6/6/09 to 6/8/09, 6/20/09 to 6/22/09 due to an erroneous leak alarm.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-01-2009

Self-Monitoring Report

LLNL Vapor Extraction System 11 (VES11)

AREA VTFD-ETCS

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treatment facility operated

April	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

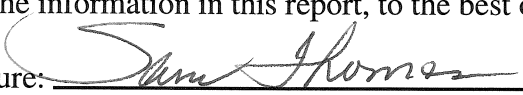
3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1904	0	0.0	0	0	0
W-ETC-2003	0	0.0	0	0	0
W-ETC-2004B	0	0.0	0	0	0
W-ETC-2004A	0	0.0	0	0	0
SIP-ETC-201	0	0.0	0	0	0
<hr/>					
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 8/12/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **05-04-2009**

Self-Monitoring Report

LLNL Vapor Extraction System 11 (VES11)

AREA VTFD-ETCS

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treatment facility operated

May	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1904	0	0.0	0	0	0
W-ETC-2003	0	0.0	0	0	0
W-ETC-2004B	0	0.0	0	0	0
W-ETC-2004A	0	0.0	0	0	0
SIP-ETC-201	0	0.0	0	0	0
<hr/>					
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 8/12/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **06-03-2009**

Self-Monitoring Report

LLNL Vapor Extraction System 11 (VES11)

AREA VTFD-ETCS

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treatment facility operated

May	30	31																	
June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15				
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1904	0	0.0	0	0	0
W-ETC-2003	0	0.0	0	0	0
W-ETC-2004B	0	0.0	0	0	0
W-ETC-2004A	0	0.0	0	0	0
SIP-ETC-201	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 8/12/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-01-2009

Self-Monitoring Report

LLNL Vapor Extraction System 07 (VES07)

AREA VTFD-HPD

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treatment facility operated

April	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1651	0	0.0	0	0	0
W-1653	0	0.0	0	0	0
W-1657	0	0.0	0	0	0
W-1654	0	0.0	0	0	0
W-1652	0	0.0	0	0	0
W-1552	0	0.0	0	0	0
W-1655	0	0.0	0	0	0
W-1656	0	0.0	0	0	0
W-1650	0	0.0	0	0	0
W-HPA-002A	0	0.0	0	0	0
W-HPA-002B	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 10-11-07 for a bioremediation test at this location. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Kowagawa Date: 05-01-2009

Self-Monitoring Report

LLNL Vapor Extraction System 07 (VES07)

AREA VTFD-HPD

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treatment facility operated

May	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1651	0	0.0	0	0	0
W-1653	0	0.0	0	0	0
W-1657	0	0.0	0	0	0
W-1654	0	0.0	0	0	0
W-1652	0	0.0	0	0	0
W-1552	0	0.0	0	0	0
W-1655	0	0.0	0	0	0
W-1656	0	0.0	0	0	0
W-1650	0	0.0	0	0	0
W-HPA-002A	0	0.0	0	0	0
W-HPA-002B	0	0.0	0	0	0
<hr/>					
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 10-11-07 for a bioremediation test at this location. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-01-2009

Self-Monitoring Report

LLNL Vapor Extraction System 07 (VES07)

AREA VTFD-HPD

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treatment facility operated

May	30	31																				
June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15							
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30							

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1651	0	0.0	0	0	0
W-1653	0	0.0	0	0	0
W-1657	0	0.0	0	0	0
W-1654	0	0.0	0	0	0
W-1652	0	0.0	0	0	0
W-1552	0	0.0	0	0	0
W-1655	0	0.0	0	0	0
W-1656	0	0.0	0	0	0
W-1650	0	0.0	0	0	0
W-HPA-002A	0	0.0	0	0	0
W-HPA-002B	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 10-11-07 for a bioremediation test at this location. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order,

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 07-01-2009

Self-Monitoring Report

LLNL Vapor Extraction System 13 (VES13)

AREA VTFD-HS

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treatment facility operated

April	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-653	0	0.0	0	0	0
W-2011	0	0.0	0	0	0
W-2101	0	0.0	0	0	0
W-2102	0	0.0	0	0	0
<hr/>					
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 6-7-07 due to a failed blower motor. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-01-2009

Self-Monitoring Report

LLNL Vapor Extraction System 13 (VES13)

AREA VTFD-HS

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treatment facility operated

May	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-653	0	0.0	0	0	0
W-2011	0	0.0	0	0	0
W-2101	0	0.0	0	0	0
W-2102	0	0.0	0	0	0
<hr/>					
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 6-7-07 due to a failed blower motor. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kouragou Date: 06-01-2009

Self-Monitoring Report

LLNL Vapor Extraction System 13 (VES13)

AREA VTFD-HS

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treatment facility operated

May	30	31														
June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-653	0	0.0	0	0	0
W-2011	0	0.0	0	0	0
W-2101	0	0.0	0	0	0
W-2102	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 6-7-07 due to a failed blower motor. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-02-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 3 (PTU3)
AREA TFE-E

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-566	0	0.0
W-1109	0	0.0
W-1903	0	0.0
W-1909	0	0.0
W-2305	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

System shut down and was secured on 6/2/08 due to electronic (PLC) failure.
Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized
order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **05-14-2009**

Self-Monitoring Report
LLNL Portable Treatment Unit 3 (PTU3)
AREA TFE-E

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-566	0	0.0
W-1109	0	0.0
W-1903	0	0.0
W-1909	0	0.0
W-2305	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

System shut down and was secured on 6/2/08 due to electronic (PLC) failure.
Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-02-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 3 (PTU3)
AREA TFE-E

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	30	31													
June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **Not Measured**

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-566	0	0.0
W-1109	0	0.0
W-1903	0	0.0
W-1909	0	0.0
W-2305	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

System shut down and was secured on 6/2/08 due to electronic (PLC) failure.
Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-01-2009

Self-Monitoring Report
LLNL GAC Treatment Unit 07 (GTU07)
AREA TFE-HS

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 734

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 04-01-2009
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 20.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2012	663,668	15.1
W-2105	2,757	0.0
Total:	<u>666,425</u>	<u>15.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>666,425</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-22-2009

Self-Monitoring Report
LLNL GAC Treatment Unit 07 (GTU07)
AREA TFE-HS

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29**

Total monthly time facility operated (hours): **701**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **05-06-2009**
Influent pH: **7.5**
Effluent pH: **7.5**
Effluent Temperature (°C): **23.9**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2012	572,944	14.9
W-2105	5,341	0.0
Total:	<u>578,285</u>	<u>14.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>578,285</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **06-02-2009**

Operator Signature: [Signature] Date: 07-01-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 9 (PTU9)
AREA TFE-NW

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 732

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 04-07-2009
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 20.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1211	759,989	17.6
W-1409	0	0.0
Total:	<u>759,989</u>	<u>17.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>759,989</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-01-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 9 (PTU9)
AREA TFE-NW

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 702

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 05-21-2009
Influent pH: 7.5
Effluent pH: 7.5
Effluent Temperature (°C): 23.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1211	726,097	17.4
W-1409	0	0.0
Total:	<u>726,097</u>	<u>17.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>726,097</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-02-2009

Operator Signature: Date: **07-01-2009**

Self-Monitoring Report
LLNL Mini Treatment Unit 04 (MTU04)
AREA TFE-SE

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-359	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

Facility shut down on 4/2/08 due to pump failure in W-359, repairs pending. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-22-2009

Self-Monitoring Report
LLNL Mini Treatment Unit 04 (MTU04)
AREA TFE-SE

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May 01 02 03 04 05 **06** **07** 08 09 10 11 12 13 14 15
 16 17 **18** **19** **20** 21 **22** **23** **24** **25** **26** **27** **28** **29**

Total monthly time facility operated (hours): 197

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **05-01-2009**
Influent pH: **7.5**
Effluent pH: **7.5**
Effluent Temperature (°C): **21.8**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-359	100,874	7.7
Total:	<u>100,874</u>	<u>7.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>100,874</u>

6. Comments:

System operations for the month varied under testing and verification operations.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **06-02-2009**

Self-Monitoring Report
LLNL Mini Treatment Unit 04 (MTU04)
AREA TFE-SE

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	30	31																	
June	01	02	03	04	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>				
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>				

Total monthly time facility operated (hours): **605**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-05-2009</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>21.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-359	369,641	10.3
Total:	<u>369,641</u>	<u>10.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>369,641</u>

6. Comments:

System secure from 5/29/09 to 6/5/09 for electronic repairs.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **07-01-2009**

Self-Monitoring Report
LLNL Mini Treatment Unit 03 (MTU03)
AREA TFE-SW

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 718

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 04-02-2009

Influent pH: 7.0

Effluent pH: 7.0

Effluent Temperature (°C): 15.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1520	33	0.0
W-1518	0	0.0
W-1522	80,545	2.0
Total:	<u>80,578</u>	<u>2.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>80,578</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Brian Mitchell Date: 05-01-2009

Self-Monitoring Report
LLNL Mini Treatment Unit 03 (MTU03)
AREA TFE-SW

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 694

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 05-04-2009
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 20.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1520	0	0.0
W-1518	0	0.0
W-1522	84,019	2.0
Total:	<u>84,019</u>	<u>2.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>84,019</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Brian Mitchell Date: 06-01-2009

Self-Monitoring Report
LLNL Mini Treatment Unit 03 (MTU03)
AREA TFE-SW

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	<u>30</u>	<u>31</u>																	
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>				
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>				

Total monthly time facility operated (hours): 763

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-03-2009</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>19.7</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1520	0	0.0
W-1518	0	0.0
W-1522	84,901	1.8
Total:	<u>84,901</u>	<u>1.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>84,901</u>

6. Comments:

N/A

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Brian Mitchell Date: 06-30-2009

Self-Monitoring Report
LLNL Mini Treatment Unit 05 (MTU05)
AREA TFE-W

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 717

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 04-08-2009
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 19.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-305	380,745	8.9
W-292	259,065	6.0
Total:	<u>639,810</u>	<u>14.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>639,810</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Brian Mitchell Date: 05-01-2009

Self-Monitoring Report
LLNL Mini Treatment Unit 05 (MTU05)
AREA TFE-W

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
16 **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29**

Total monthly time facility operated (hours): **693**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **05-01-2009**
Influent pH: **7.0**
Effluent pH: **7.0**
Effluent Temperature (°C): **20.8**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-305	367,660	8.8
W-292	250,318	6.0
Total:	<u>617,978</u>	<u>14.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>617,978</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Brian Mitchell Date: **06-01-2009**

Self-Monitoring Report
LLNL Mini Treatment Unit 05 (MTU05)
AREA TFE-W

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	<u>30</u>	<u>31</u>																		
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>					
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>					

Total monthly time facility operated (hours): 765

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-03-2009</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>20.5</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-305	406,592	8.8
W-292	275,439	6.0
Total:	<u>682,031</u>	<u>14.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>682,031</u>

6. Comments:

N/A

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Brian Mitchell Date: 06-30-2009

Self-Monitoring Report

LLNL Vapor Extraction System 16 (VES16)

AREA VTFE-ELM

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treatment facility operated

April	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

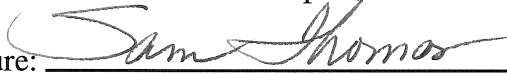
3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1903	0	0.0	0	0	0
W-1909	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-003	0	0.0	0	0	0
W-543-001	0	0.0	0	0	0
W-543-1908	0	0.0	0	0	0
<hr/>					
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 2/06/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-04-2009

Self-Monitoring Report

LLNL Vapor Extraction System 16 (VES16)

AREA VTFE-ELM

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treatment facility operated

May	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1903	0	0.0	0	0	0
W-1909	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-003	0	0.0	0	0	0
W-543-001	0	0.0	0	0	0
W-543-1908	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 2/06/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-04-2009

Self-Monitoring Report

LLNL Vapor Extraction System 16 (VES16)

AREA VTFE-ELM

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treatment facility operated

May	30	31																		
June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15					
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1903	0	0.0	0	0	0
W-1909	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-003	0	0.0	0	0	0
W-543-001	0	0.0	0	0	0
W-543-1908	0	0.0	0	0	0
<div style="display: flex; justify-content: space-between;"> Total: <u>0</u> <u>0.0</u> </div>					

4. Comments:

This treatment facility was shut down on 2/06/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-01-2009

Self-Monitoring Report

LLNL Vapor Extraction System 12 (VES12)

AREA VTFE-HS

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treatment facility operated

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-ETS-2010B	0	0.0	0	0	0
W-ETS-2010A	0	0.0	0	0	0
W-ETS-2009	0	0.0	0	0	0
W-ETS-2008A	0	0.0	0	0	0
W-ETS-2008B	0	0.0	0	0	0
W-2105	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

TFE-HS did not operate in the month of April 2009. Facility failed on 3/10/08 due to a catastrophic motor failure of the liquid ring vacuum pump. DOE and the regulatory agencies were notified of this action. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **05-04-2009**

Self-Monitoring Report

LLNL Vapor Extraction System 12 (VES12)

AREA VTFE-HS

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treatment facility operated

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-ETS-2010B	0	0.0	0	0	0
W-ETS-2010A	0	0.0	0	0	0
W-ETS-2009	0	0.0	0	0	0
W-ETS-2008A	0	0.0	0	0	0
W-ETS-2008B	0	0.0	0	0	0
W-2105	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

TFE-HS did not operate in the month of May 2009. Facility failed on 3/10/08 due to a catastrophic motor failure of the liquid ring vacuum pump. DOE and the regulatory agencies were notified of this action. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 06-04-2009

Self-Monitoring Report

LLNL Vapor Extraction System 12 (VES12)

AREA VTFE-HS

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treatment facility operated

May	30	31																												
June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15															
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30															

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-ETS-2010B	0	0.0	0	0	0
W-ETS-2010A	0	0.0	0	0	0
W-ETS-2009	0	0.0	0	0	0
W-ETS-2008A	0	0.0	0	0	0
W-ETS-2008B	0	0.0	0	0	0
W-2105	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

TFE-HS did not operate in the month of June 2009. Facility failed on 3/10/08 due to a catastrophic motor failure of the liquid ring vacuum pump. DOE and the regulatory agencies were notified of this action. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **07-01-2009**

Self-Monitoring Report
LLNL GAC Treatment Unit 01 (GTU01)
AREA TFG-1

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 721

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>04-06-2009</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>20.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1111	384,394	8.8
Total:	<u>384,394</u>	<u>8.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>384,394</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-22-2009

**Land Observation Report date:
TFG-ASW - Arroyo Seco**

1. Reporting Period: Business Month April Year 2009
2. Date compliance sampling performed 04-06-2009
3. Weather Conditions:

Average air tempertaure (°C):	<u>12.3</u>
6-day total precipitation (in):	<u>0</u>
Average wind speed/direction (mph):	<u>6/ SSE</u>

4. Receiving Data:

Sample Location	pH	Temperature (C)
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>N/A</u>

6. Comments:
7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-22-2009

Self-Monitoring Report
LLNL GAC Treatment Unit 01 (GTU01)
AREA TFG-1

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**
 16 **17** **18** **19** **20** **21** **22** **23** 24 25 26 27 **28** **29**

Total monthly time facility operated (hours): **569**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **05-08-2009**
Influent pH: **7.0**
Effluent pH: **7.0**
Effluent Temperature (°C): **20.7**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1111	304,046	8.8
Total:	<u>304,046</u>	<u>8.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>304,046</u>

6. Comments:

System secure form 5/23/09 to 5/28/09 due to power outage and electronic repairs.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _____

Date: **06-02-2009**

Land Observation Report date:
TFG-ASW - Arroyo Seco

1. Reporting Period: Business Month May Year 2009

2. Date compliance sampling performed 05-08-2009

3. Weather Conditions:

Average air tempertaure (°C):	<u>17</u>
6-day total precipitation (in):	<u>.07</u>
Average wind speed/direction (mph):	<u>6/ SW</u>

4. Receiving Data:

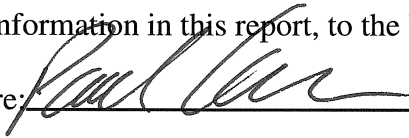
Sample Location	pH	Temperature (C)
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>N/A</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-02-2009

Self-Monitoring Report
LLNL GAC Treatment Unit 01 (GTU01)
AREA TFG-1

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	<u>30</u>	<u>31</u>																	
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	13	14	<u>15</u>				
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>				

Total monthly time facility operated (hours): 696

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-09-2009</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>21.3</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1111	370,614	8.9
Total:	<u>370,614</u>	<u>8.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>370,614</u>

6. Comments:

System secured on 6/12/09 for scheduled power outage. System restarted 6/15/09.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-01-2009

Land Observation Report date:
TFG-ASW - Arroyo Seco

1. Reporting Period: Business Month June Year 2009

2. Date compliance sampling performed 06-09-2009

3. Weather Conditions:

Average air tempertaure (°C):	<u>15.2</u>
6-day total precipitation (in):	<u>0</u>
Average wind speed/direction (mph):	<u>8/ SW</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>N/A</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-02-2009

Self-Monitoring Report
LLNL Mini Treatment Unit 02 (MTU02)
AREA TFG-N

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1807	0	0.0
W-1806	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

System shut down on 6/20/08 due to high sump alarm. System secured until repairs can be made. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **05-14-2009**

Self-Monitoring Report
LLNL Mini Treatment Unit 02 (MTU02)
AREA TFG-N

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1807	0	0.0
W-1806	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

System shut down on 6/20/08 due to high sump alarm. System secured until repairs can be made. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **06-02-2009**

Self-Monitoring Report
LLNL Mini Treatment Unit 02 (MTU02)
AREA TFG-N

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	30	31																	
June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15				
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1807	0	0.0
W-1806	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

System shut down on 6/20/08 due to high sump alarm. System secured until repairs can be made. It has not been restarted due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **07-01-2009**

Self-Monitoring Report
LLNL Portable Treatment Unit 5 (PTU5)
AREA TF406

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 628

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 04-06-2009
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 24.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(gal)</u>	<u>Instantaneous</u> <u>Flow Rate(gpm)</u>
W-1309	246	5.9
W-1310	602,295	16.0
GSW-445	0	0.0
Total:	<u>602,541</u>	<u>21.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving</u> <u>Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>602,541</u>

6. Comments:

System secure from 4/10/09 to 4/14/09 due to air stripper level switch failure.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-22-2009

Self-Monitoring Report
LLNL Portable Treatment Unit 5 (PTU5)
AREA TF406

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 **21** **22** **23** **24** **25** **26** **27** **28** **29**

Total monthly time facility operated (hours): 554

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 05-08-2009
Influent pH: 7.0
Effluent pH: 7.0
Effluent Temperature (°C): 24.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1309	0	0.0
W-1310	532,316	16.3
GSW-445	0	0.0
Total:	<u>532,316</u>	<u>16.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>532,316</u>

6. Comments:

System down from 5/15/09 to 5/21/09 due to electronic trouble shooting of a transient leak alarm.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-02-2009

Operator Signature: [Signature] Date: 07-01-2009

Self-Monitoring Report
LLNL GAC Treatment Unit 03 (GTU03)
AREA TF406-NW

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1801	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

System secure until well W-1801 pump repairs can be completed. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct. _

Operator Signature:  Date: 05-14-2009

Self-Monitoring Report
LLNL GAC Treatment Unit 03 (GTU03)
AREA TF406-NW

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	<u>21</u>	<u>22</u>	23	24	25	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	

Total monthly time facility operated (hours): 116

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>05-21-2009</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>25.3</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1801	28,696	4.0
Total:	<u>28,696</u>	<u>4.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>28,696</u>

6. Comments:

System operations for the month varied under testing and verification operations.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: _____

Date: 06-02-2009

Self-Monitoring Report
LLNL GAC Treatment Unit 03 (GTU03)
AREA TF406-NW

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	<u>30</u>	<u>31</u>																		
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>					
	16	17	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>					

Total monthly time facility operated (hours): 692

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-10-2009</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>23.2</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1801	217,972	5.6
Total:	<u>217,972</u>	<u>5.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>217,972</u>

6. Comments:

System secure from 6/15/09 to 6/18/08 for well recovery and resting prior to the TF406-NW extraction wellfield start up.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-01-2009

Self-Monitoring Report
LLNL Solar Treatment Unit 09 (STU09)
AREA TF518-N

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1410	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott Kawaguchi Date: 05-01-2009

Self-Monitoring Report
LLNL Solar Treatment Unit 09 (STU09)
AREA TF518-N

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1410	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kaurigan Date: 06-01-2009

Self-Monitoring Report
LLNL Solar Treatment Unit 09 (STU09)
AREA TF518-N

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	30	31																	
June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15				
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1410	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **07-02-2009**

Self-Monitoring Report
LLNL Treatment Facility 518-HDTANK (TF518-HDTANK)
AREA TF518-PZ

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1615	0	0.0
W-518-1913	0	0.0
W-518-1915	0	0.0
W-518-1914	0	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
Total:	<u>0</u>	<u>0.0</u>


5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-27-08 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **05-04-2009**

Self-Monitoring Report
LLNL Treatment Facility 518-HDTANK (TF518-HDTANK)
AREA TF518-PZ

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1615	0	0.0
W-518-1913	0	0.0
W-518-1915	0	0.0
W-518-1914	0	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
Total:	<u>0</u>	<u>0.0</u>

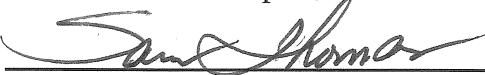
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-27-08 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-05-2009

Self-Monitoring Report
LLNL Treatment Facility 518-HDTANK (TF518-HDTANK)
AREA TF518-PZ

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	30	31																											
June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15														
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30														

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1615	0	0.0
W-518-1913	0	0.0
W-518-1915	0	0.0
W-518-1914	0	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-27-08 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 07-01-2009

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 1 (CRD1)
AREA TF5475-1

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **Not Measured**

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1302-2	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-1 injection</u>	<u>W-1302-1</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 7/27/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-14-2009

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 1 (CRD1)
AREA TF5475-1

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1302-2	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-1 injection</u>	<u>W-1302-1</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 7/27/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-02-2009

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 1 (CRD1)
AREA TF5475-1

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	30	31														
June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **Not Measured**

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1302-2	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-1 injection</u>	<u>W-1302-1</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 7/27/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-01-2009

Self-Monitoring Report
LLNL GAC Treatment Unit 09 (GTU09)
AREA TF5475-2

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1108	0	0.0
W-1415	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2/27/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-01-2009

Self-Monitoring Report
LLNL GAC Treatment Unit 09 (GTU09)
AREA TF5475-2

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May 01 02 03 04 05 06 07 **08** 09 10 11 12 13 14 15
 16 17 18 19 **20** **21** **22** 23 24 25 **26** **27** **28** **29**

Total monthly time facility operated (hours): 35

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 05-08-2009
Influent pH: 6.5
Effluent pH: 8.0
Effluent Temperature (°C): 21.7

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1108	8,260	4.6
W-1415	0	0.0
Total:	<u>8,260</u>	<u>4.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>8,260</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-01-2009

Self-Monitoring Report
LLNL GAC Treatment Unit 09 (GTU09)
AREA TF5475-2

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	<u>30</u>	<u>31</u>																	
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	13	14	15				
	16	17	18	19	20	21	22	23	24	25	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>				

Total monthly time facility operated (hours): 292

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-03-2009</u>
Influent pH:	<u>6.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>21.1</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1108	68,544	4.6
W-1415	0	0.0
Total:	<u>68,544</u>	<u>4.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>68,544</u>

6. Comments:

GTU09 operated intermittently from May 30 to June 12 (testing and verification phase of REVAL) then continuously once re-activated on June 26th.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-30-2009

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 2 (CRD2)
AREA TF5475-3

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

April	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1608	0	0.0
W-1605	0	0.0
W-1604	0	0.0
W-1609	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-2 injection</u>	<u>W-1610</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 8/31/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **05-14-2009**

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 2 (CRD2)
AREA TF5475-3

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1608	0	0.0
W-1605	0	0.0
W-1604	0	0.0
W-1609	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-2 injection</u>	<u>W-1610</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 8/31/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-02-2009

Self-Monitoring Report
LLNL Catalytic Reductive Dehalogenation 2 (CRD2)
AREA TF5475-3

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treated ground water was discharged

May	30	31													
June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1608	0	0.0
W-1605	0	0.0
W-1604	0	0.0
W-1609	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-2 injection</u>	<u>W-1610</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 8/31/07. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **07-01-2009**

Self-Monitoring Report

LLNL Vapor Extraction System 08 (VES08)

AREA VTF406-HS

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treatment facility operated

April 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-217	1,070,529	26.4	-4.62	66	713
W-514-2007B	711,295	16.3	-4.9	66	727
W-514-2007A	184,623	3.0	-5.07	66	727
Total:	<u>1,966,447</u>	<u>45.7</u>			

4. Comments:

VES 08 was shutdown 4/30/09 to perform maintenance to inlet piping, and to reset facility and wellfield totalizers.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-04-2009

Self-Monitoring Report

LLNL Vapor Extraction System 08 (VES08)

AREA VTF406-HS

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treatment facility operated

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-217	926,802	25.5	-4.62	73.4	675
W-514-2007B	457,378	16.4	-4.88	73.4	675
W-514-2007A	194,665	3.9	-5.08	73.4	669
Total:	<u>1,578,845</u>	<u>45.8</u>			

4. Comments:

Extraction well flow rates were reduced 5/06/09 as instructed by Roberto Ruiz.
 Quarterly soil vapor samples collected 5/07/09

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 06-04-2009

Self-Monitoring Report

LLNL Vapor Extraction System 08 (VES08)

AREA VTF406-HS

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treatment facility operated

May	<u>30</u>	<u>31</u>																		
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>					
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>					

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-217	1,063,966	22.6	-2.76	71.6	777
W-514-2007B	467,947	10.1	-2.79	71.6	777
W-514-2007A	226,541	4.7	-5.77	71.6	777
Total:	<u>1,758,454</u>	<u>37.3</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 07-01-2009

Self-Monitoring Report

LLNL Vapor Extraction System 14 (VES14)

AREA VTF511

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treatment facility operated

April	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-274	0	0.0	0	0	0
W-2208A	0	0.0	0	0	0
W-2207A	0	0.0	0	0	0
W-2207B	0	0.0	0	0	0
W-1517	0	0.0	0	0	0
W-2208B	0	0.0	0	0	0
W-2204	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
<hr style="border: 1px solid black;"/>					
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

VTF-511 did not operate in the month of April 2009. Facility was discovered non-operational on Mon. 8/18/08 with no available electronic data, no indication of date or time of failure. SMR data is based on log book data collected on Friday 8/15/08. Operational days and totals may need to be revised once the electronic data has been evaluated. Facility is currently non-operational. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-04-2009

Self-Monitoring Report

LLNL Vapor Extraction System 14 (VES14)

AREA VTF511

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treatment facility operated

May 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15
 16 17 18 19 20 21 22 23 24 25 26 27 **28** 29

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-274	0	0.0	0	0	0
W-2208A	0	0.0	0	0	0
W-2207A	0	0.0	0	0	0
W-2207B	595	4.3	-24	70	2
W-1517	0	0.0	0	0	0
W-2208B	717	5.4	-6	70	2
W-2204	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
Total:	<u>1,312</u>	<u>9.6</u>			

4. Comments:

As part of the REVAL facility re-activation process, intermittent operation of SVE wells W-2207B and W-2208B occurred at the end of May.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **06-08-2009**

Self-Monitoring Report

LLNL Vapor Extraction System 14 (VES14)

AREA VTF511

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treatment facility operated

May	30	31																				
June	01	02	03	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>							
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>							

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-274	0	0.0	0	0	0
W-2208A	62,698	0.0	0	0	559
W-2207A	62,431	0.0	0	0	559
W-2207B	161,180	5.4	-4	70	559
W-1517	0	0.0	0	0	0
W-2208B	154,467	5.5	-6.1	70	559
W-2204	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
Total:	<u>440,776</u>	<u>10.9</u>			

4. Comments:

Facility experienced several unexpected shutdowns during reporting month due to erratic operation of unit condensate removal system. Condensate Pump was replaced 6/24/09. Following the recording of month end readings, Facility totalizers were reset to zero.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-02-2009

Self-Monitoring Report

LLNL Vapor Extraction System 19 (VES19)

AREA VTF518-PZ

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treatment facility operated

April	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

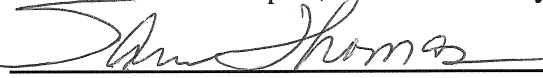
3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	0	0.0	0	0	0
W-518-1913	0	0.0	0	0	0
W-518-1915	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 2/27/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **05-04-2009**

Self-Monitoring Report

LLNL Vapor Extraction System 19 (VES19)

AREA VTF518-PZ

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treatment facility operated

May	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	0	0.0	0	0	0
W-518-1913	0	0.0	0	0	0
W-518-1915	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 2/27/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available staff and resources.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-04-2009

Self-Monitoring Report

LLNL Vapor Extraction System 19 (VES19)

AREA VTF518-PZ

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treatment facility operated

May	30	31																										
June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15													
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30													

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1615	0	0.0	0	0	0
W-518-1913	0	0.0	0	0	0
W-518-1915	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Comments:

This treatment facility was shut down on 2/27/08. Due to a FY 2008 funding reduction, facilities will be restarted in a prioritized order, pending available

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **07-02-2009**

Self-Monitoring Report

LLNL Vapor Extraction System 01 (VES01)

AREA VTF5475

1. Reporting Period: Business Month April Year 2009

2. Dates (in **bold** and underline) treatment facility operated

April	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-ETS-507	0	0.0	0	0	0
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
<hr/>					
Total:	<u>0</u>	<u>0.0</u>			

4. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>VTF5475 Vapor Injection Well</u>	<u>SVI-ETS-505</u>	<u>0</u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Stott Curagan Co. Date: 05-01-2009

Self-Monitoring Report

LLNL Vapor Extraction System 01 (VES01)

AREA VTF5475

1. Reporting Period: Business Month May Year 2009

2. Dates (in **bold** and underline) treatment facility operated

May	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-ETS-507	0	0.0	0	0	0
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
Total:					
	<u>0</u>	<u>0.0</u>			

4. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>VTF5475 Vapor Injection Well</u>	<u>SVI-ETS-505</u>	<u>0</u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-01-2009

Self-Monitoring Report

LLNL Vapor Extraction System 01 (VES01)

AREA VTF5475

1. Reporting Period: Business Month June Year 2009

2. Dates (in **bold** and underline) treatment facility operated

May	30	31																	
June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15				
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-ETS-507	0	0.0	0	0	0
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>VTF5475 Vapor Injection Well</u>	<u>SVI-ETS-505</u>	<u>0</u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY 2008 funding reduction. Facilities will be restarted in a prioritized order, pending available staff and resources.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Karguza Date: 07-02-2009

Attachment C

Lake Haussmann

Attachment C

Lake Haussmann Second Quarter 2009 Monitoring Program Summary

This attachment summarizes the second quarter 2009 LLNL Environmental Protection Department discharge data for Lake Haussmann. Lake Haussmann is an artificial water body that has a 37 acre-ft capacity. It is located in the central portion of the Livermore Site (Fig. C-1) and receives storm water runoff and treated ground water discharges.

Samples are collected from water discharged from Lake Haussmann and analyzed as outlined in Jackson (2002). The discharge samples are used to determine compliance with discharge limits in the *Record of Decision* (DOE, 1992), and the subsequent *Explanation of Significant Differences for Metals Discharge Limits* (Berg et al., 1997).

Dry season (June through September) discharges are sampled at each manual release or monthly during periods of continual release. Wet season (October through May) discharge samples are collected at the first release of the wet season and one other discharge in conjunction with a storm water monitoring event. Analytic results of discharge samples collected at location CDBX are compared with the LLNL Arroyo Las Positas outfall sample results collected at location WPDC (Fig. C-1). The results for samples collected at locations CDBX and WPDC are presented in Table C-1. All PCBs were below detection limits. No metals exceed discharge limits. The pH value at the CDBX exceeded the desired range of 6.5 to 8.5. The pH has averaged 8.8 since 1998 and is typically elevated during summer due to increased photosynthesis. Aquatic bioassay tests showed no toxicity.

Discharge from Lake Haussmann remained continuous during the second quarter. The first dry season sample was collected on June 25, 2009. The Lake Haussmann upper weir gate was maintained at the lowered position during the entire second quarter so that releases occurred continuously to minimize changes in surface water level and allow for a more natural ecosystem.

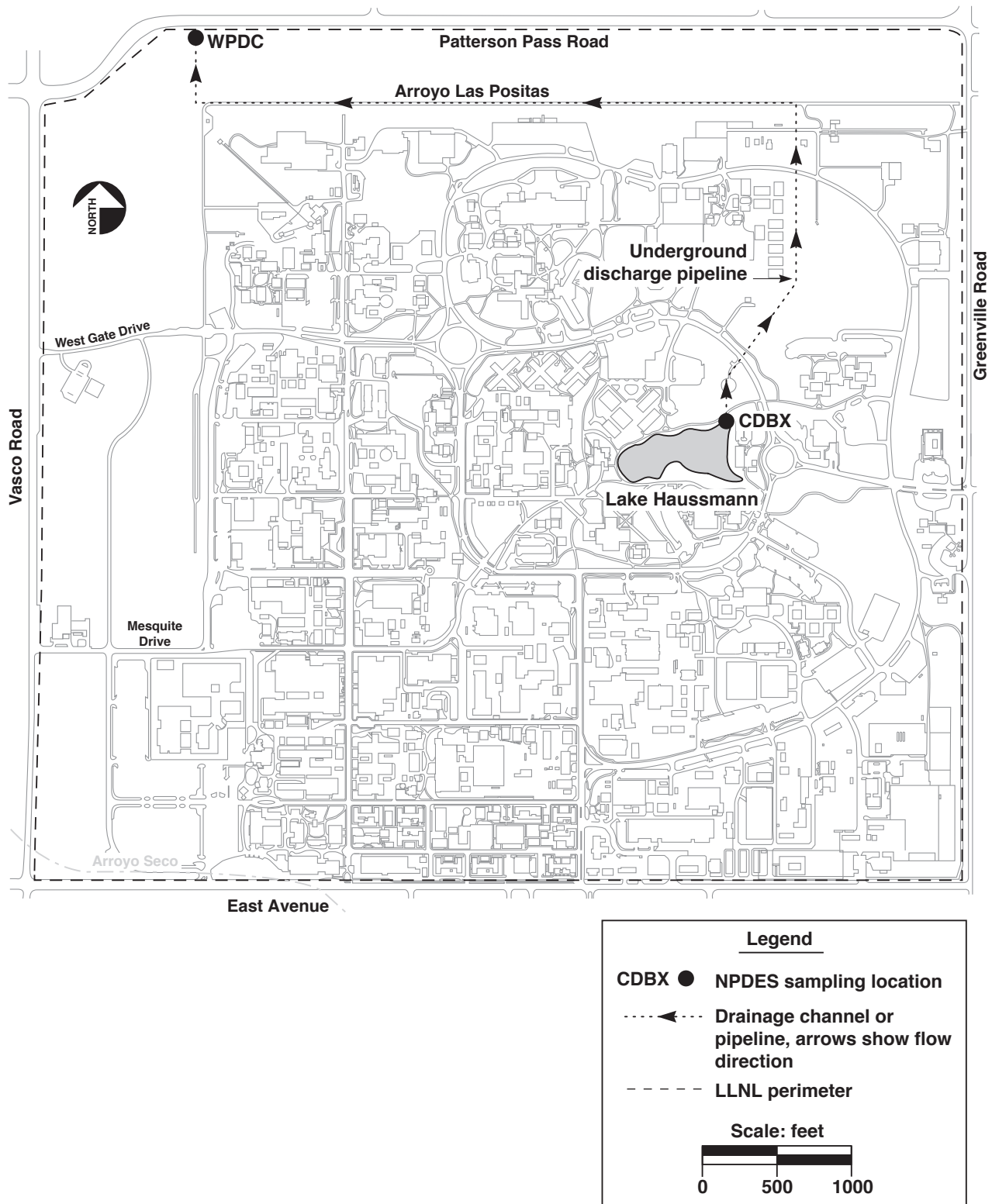
References

- U.S. Department of Energy, *Record of Decision for the Lawrence Livermore National Laboratory, Livermore Site*, Lawrence Livermore National Laboratory, Livermore, CA, UCRL-AR-109105, (1992).
- Berg, L.L., E.N. Folsom, M.D. Dresen, R.W. Bainer, and A.L. Lamarre, Eds., *Explanation of Significant Differences for Metals Discharge Limits at the Lawrence Livermore National Laboratory, Livermore Site*, Lawrence Livermore National Laboratory, Livermore, CA, UCRL-AR-125927 (1997).
- Jackson, C.S., *Drainage Retention Basin Monitoring Plan Change*, Letter to Ms. Naomi Feger, San Francisco Bay RWQCB, Lawrence Livermore National Laboratory, Livermore, CA, WGMG02:175:CSJ:RW:kh, (December 6, 2002).

Table C-1 LLNL Lake Haussmann release monitoring data for points CDBX and WPDC, April through June 2009.

			CDBX 6/25	WPDC 6/25	Discharge Limits 1-Apr through 30-Nov	Discharge Limits 1-Dec through 31-Mar
Physical						
pH	Units	EPA-150.1	9.79	8.34	not <6.5 or >8.5	not <6.5 or >8.5
Total suspended solids (TSS)	mg/L	EPA-160.2	1.7	79.	na	na
Metals - Total						
Aluminum	mg/L	EPA-200.7	<0.05	0.34	na	na
Antimony	mg/L	EPA-200.8	<0.002	<0.002	0.006	na
Arsenic	mg/L	EPA-200.8	<0.002	<0.002	0.05	0.01
Barium	mg/L	EPA-200.7	0.067	0.11	na	na
Beryllium	mg/L	EPA-210.2	<0.0002	<0.0002	0.004	na
Boron	mg/L	EPA-200.7	1.6	1.3	na	na
Cadmium	mg/L	EPA-200.8	<0.001	<0.001	0.005	0.0022
Chromium	mg/L	EPA-200.8	<0.003	0.011	0.05	na
Cobalt	mg/L	EPA-200.7	<0.05	<0.05	na	na
Copper	mg/L	EPA-200.8	<0.002	<0.002	1.3	0.0236
Hexavalent Chromium	mg/L	EPA-218.6	0.0011	0.0069	na	0.022
Iron	mg/L	EPA-200.7	<0.05	0.45	na	na
Lead	mg/L	EPA-200.8	<0.001	<0.001	0.015	0.0064
Manganese	mg/L	EPA-200.8	0.0051	0.014	0.5	0.5
Mercury	mg/L	EPA-245.1	<0.0002	<0.0002	0.002	0.002
Molybdenum	mg/L	EPA-200.8	0.0024	0.0022	0.05	na
Nickel	mg/L	EPA-200.8	<0.002	0.0027	0.1	0.32
Selenium	mg/L	EPA-200.8	<0.002	<0.002	0.05	0.01
Silver	mg/L	EPA-200.8	<0.001	<0.001	0.1	0.0082
Thallium	mg/L	EPA-200.8	<0.001	<0.001	0.002	na
Vanadium	mg/L	EPA-200.7	<0.01	<0.01	na	na
Zinc	mg/L	EPA-200.7	<0.05	<0.05	na	0.22
Polychlorinated biphenyls						
PCB 1016	ug/L	E8082A	<0.5	a	na	na
PCB 1221	ug/L	E8082A	<0.5	a	na	na
PCB 1232	ug/L	E8082A	<0.5	a	na	na
PCB 1242	ug/L	E8082A	<0.5	a	na	na
PCB 1248	ug/L	E8082A	<0.5	a	na	na
PCB 1254	ug/L	E8082A	<0.5	a	na	na
PCB 1260	ug/L	E8082A	<0.5	a	na	na
Toxicity						
Aq. Bioassay, Survival	Percent	Title 22	100	95	na	na

a) Sampling for these analytes not required at this location during this period.



ERD-S3R-08-0041

Figure C-1. Location of Lake Haussmann showing discharge sampling locations.

Attachment D

Figures

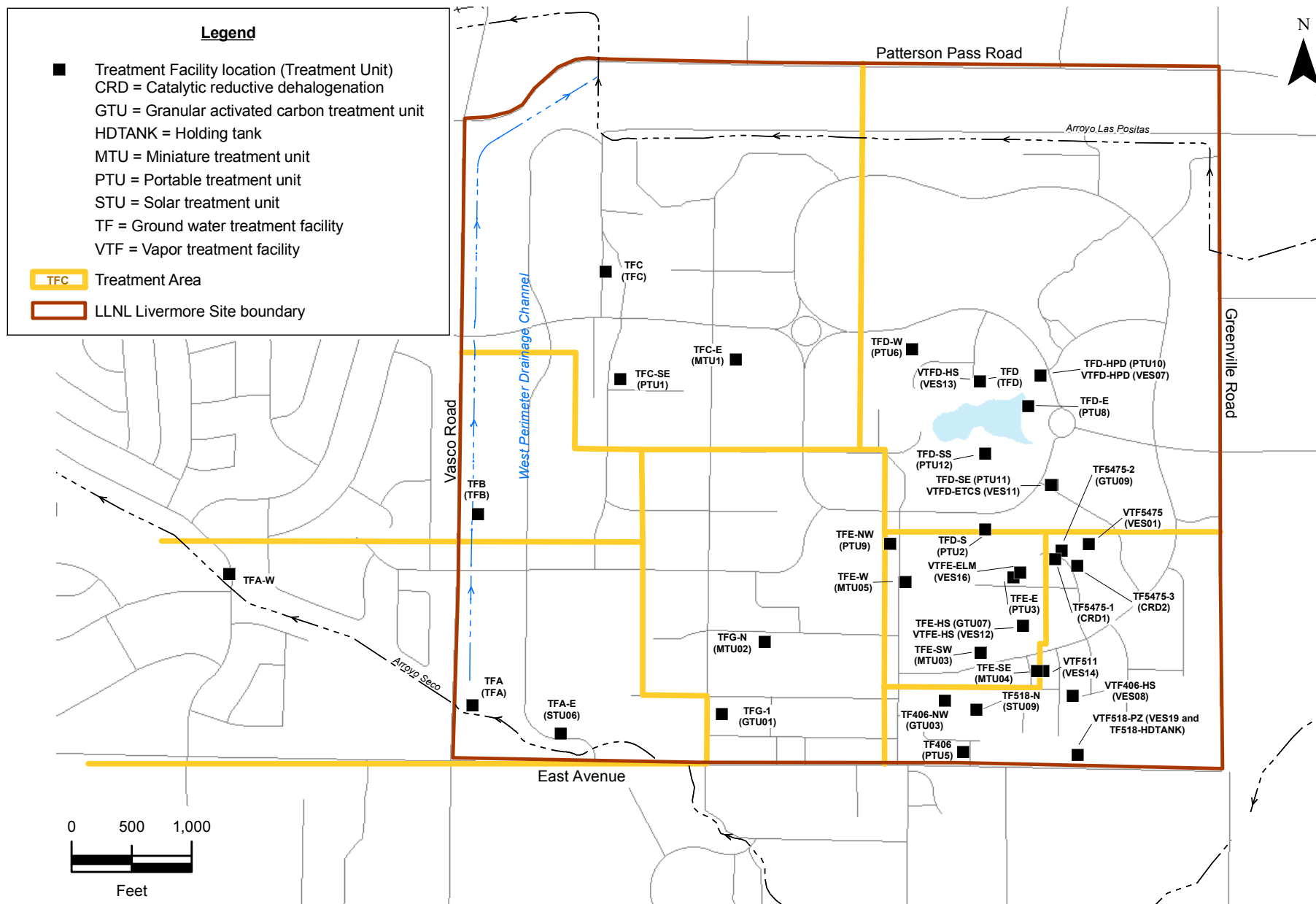


Figure 1. Livermore Site treatment areas and treatment facility locations.

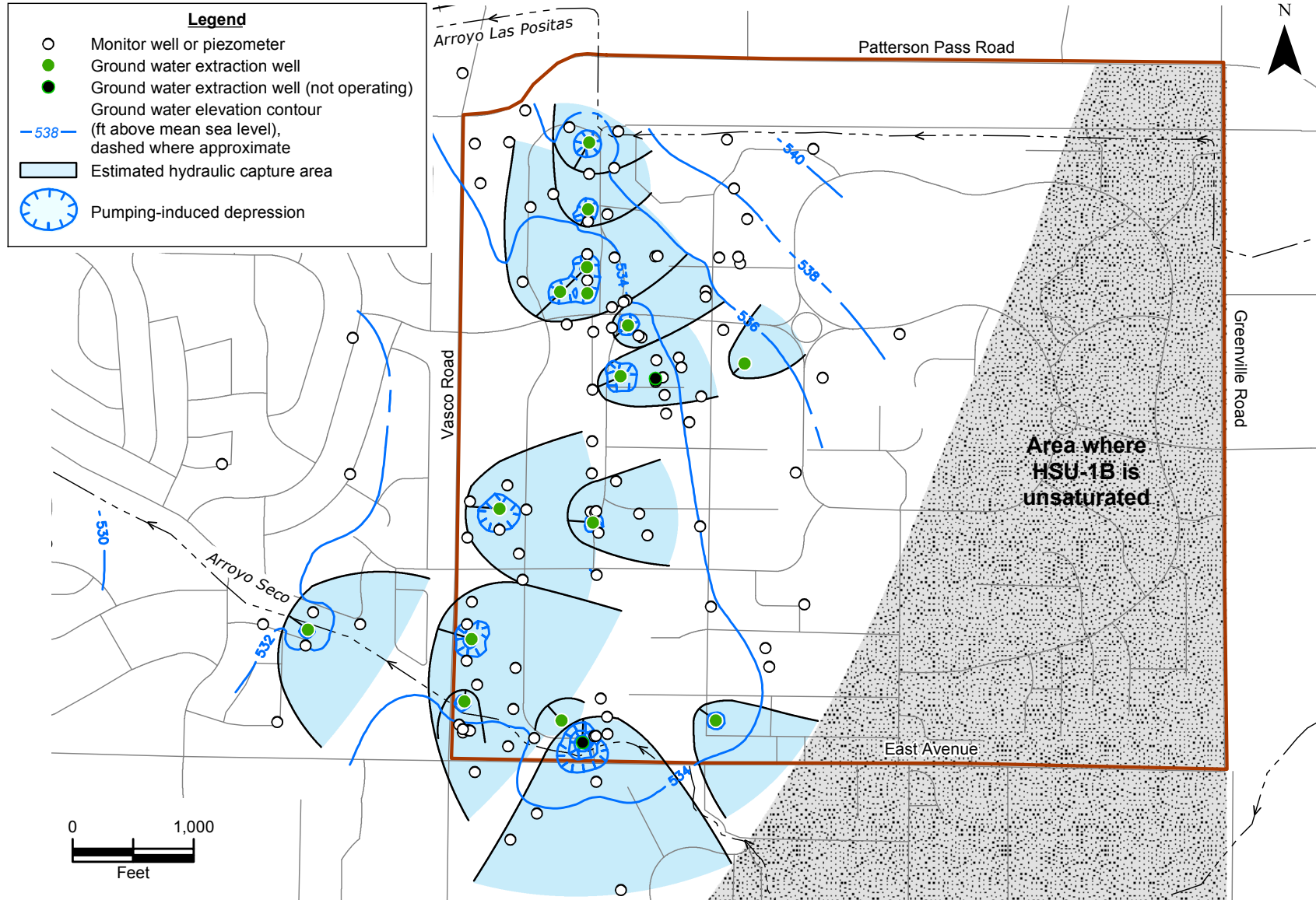


Figure 2. Ground water elevation contour map based on 123 wells completed within HSU-1B showing estimated hydraulic capture areas, LLNL and vicinity, April 2009.

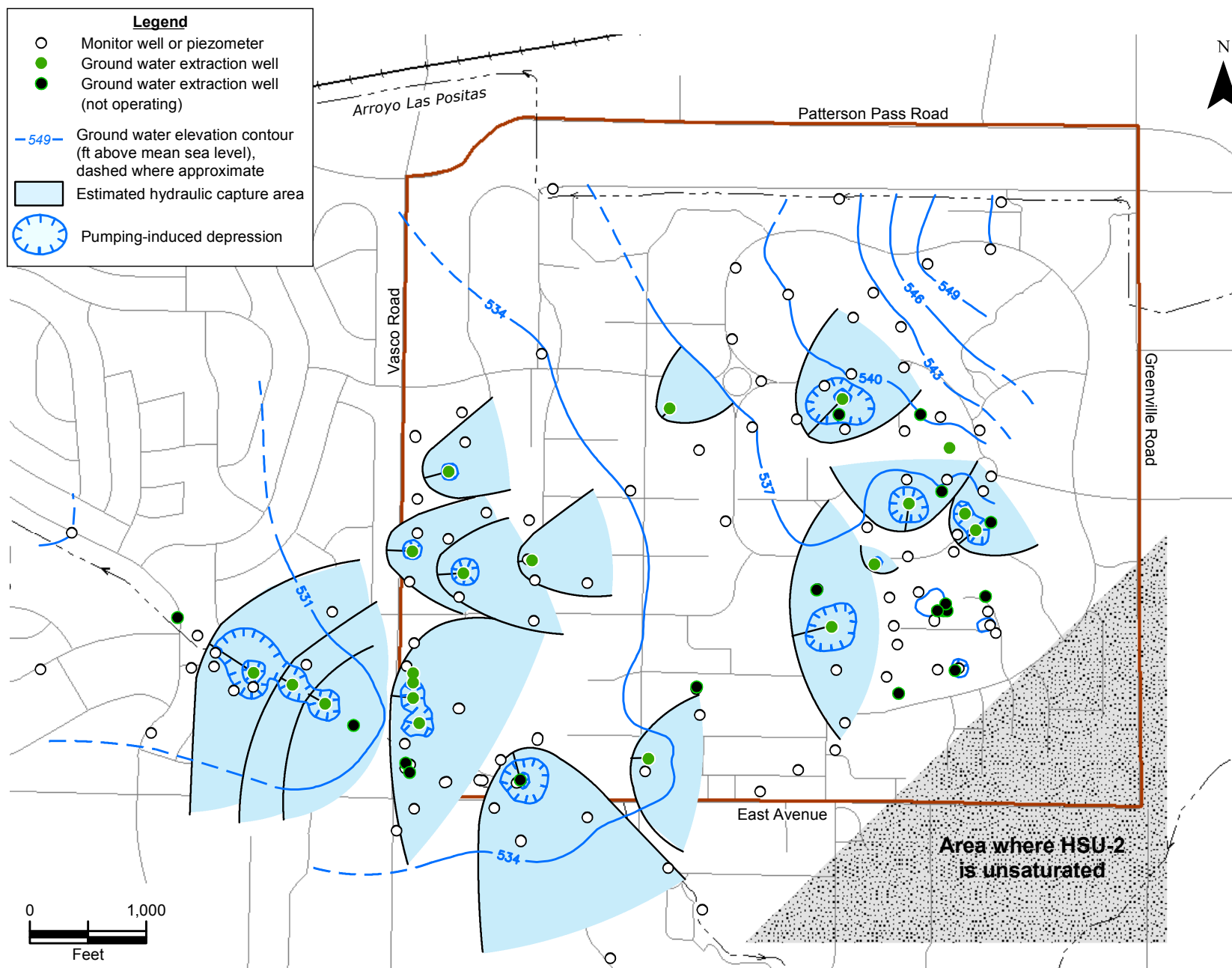


Figure 3. Ground water elevation contour map based on 146 wells completed within HSU-2 showing estimated hydraulic capture areas, LLNL and vicinity, April 2009.

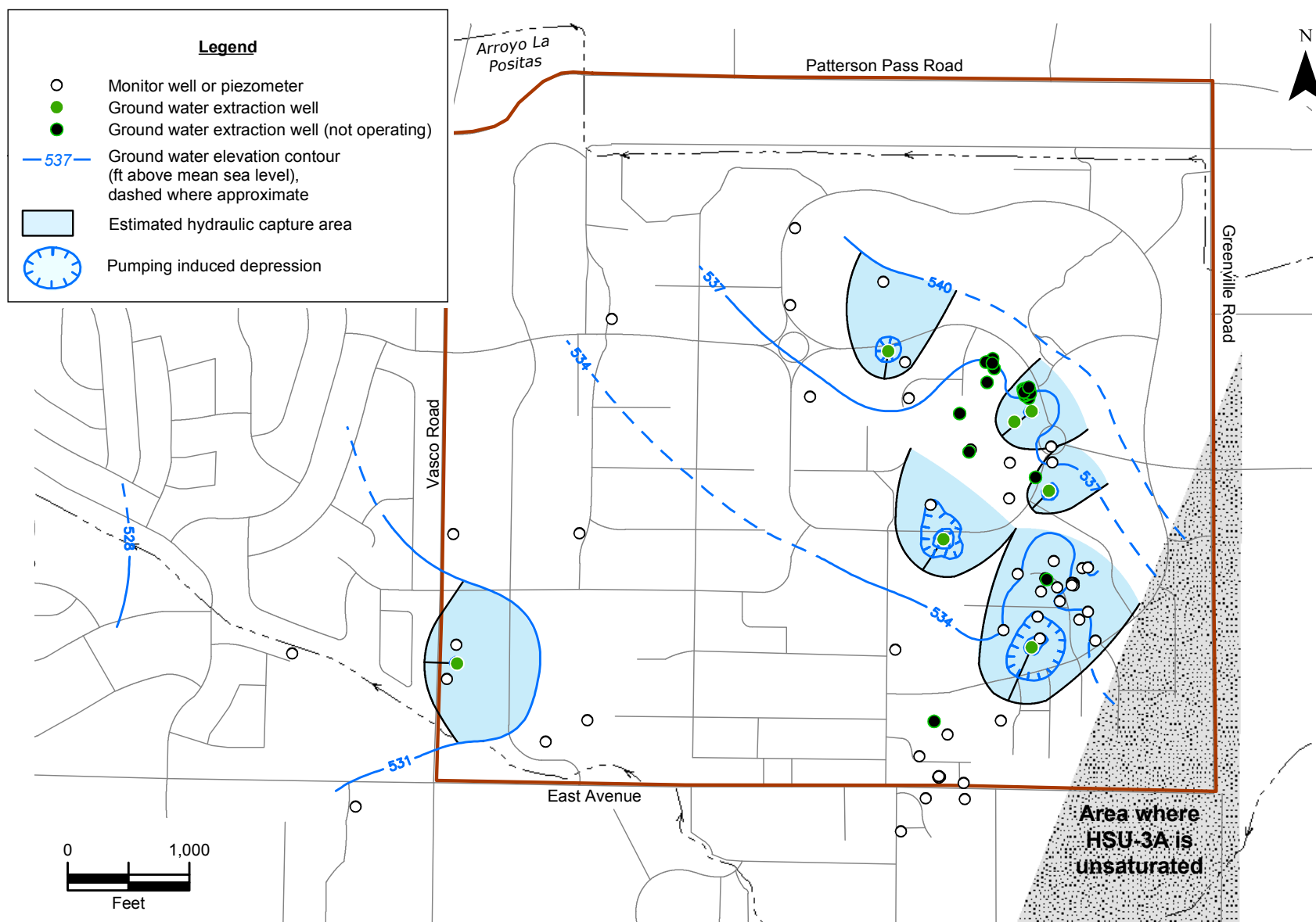


Figure 4. Ground water elevation contour map based on 79 wells completed within HSU-3A showing estimated hydraulic capture areas, LLNL and vicinity, April 2009.

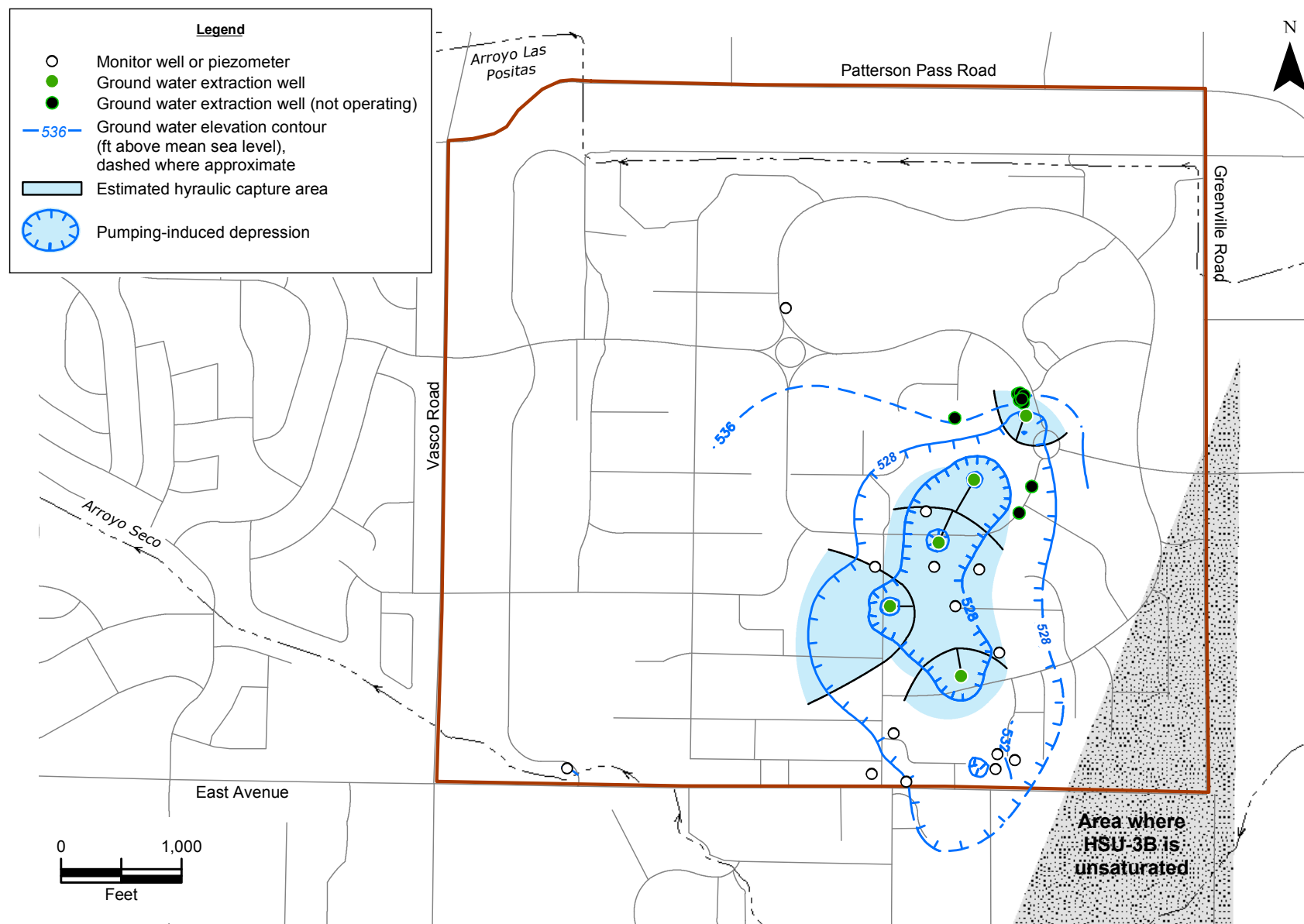


Figure 5. Ground water elevation contour map based on 29 wells completed within HSU-3B showing estimated hydraulic capture areas, LLNL and vicinity, April 2009.

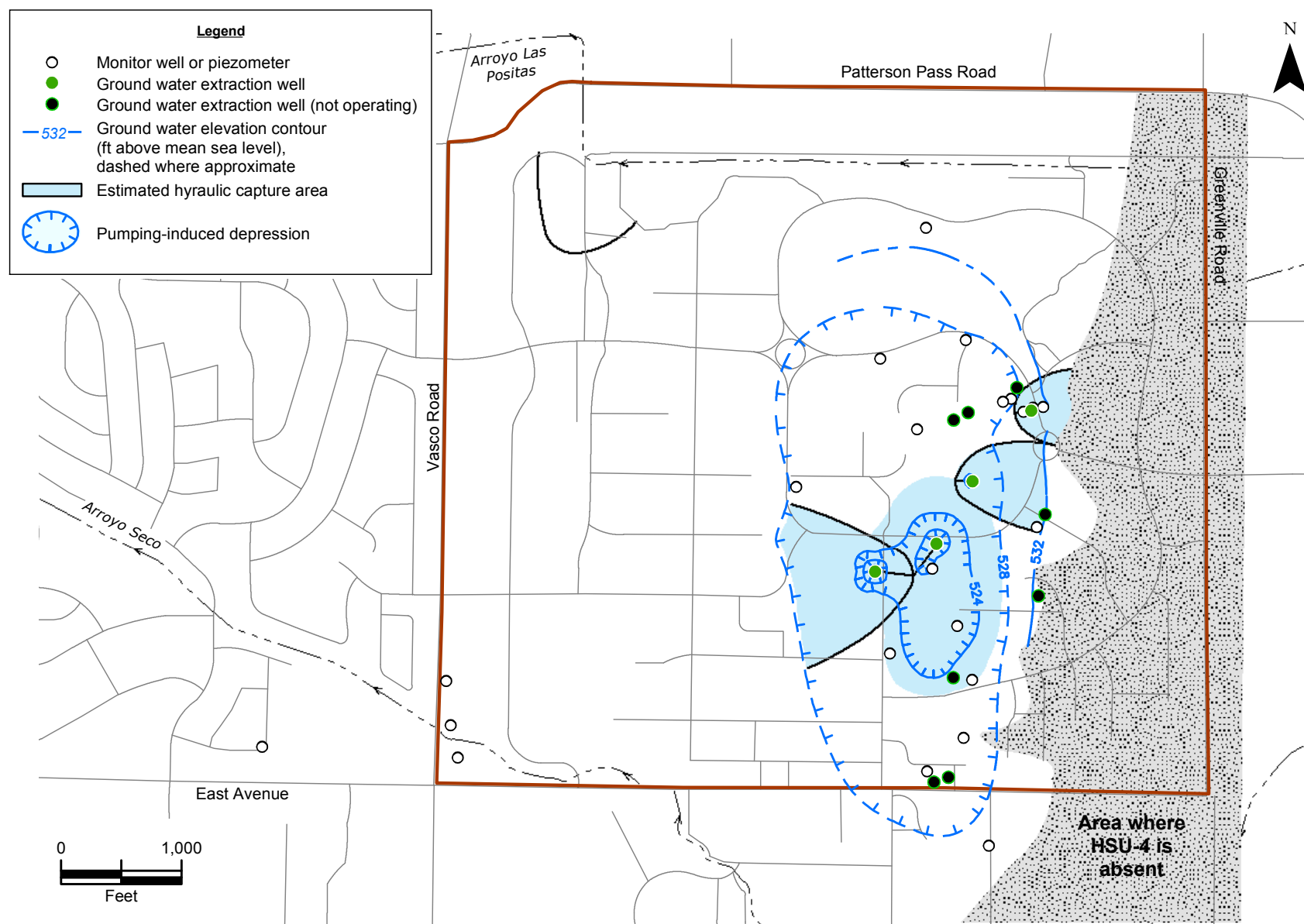


Figure 6. Ground water elevation contour map based on 34 wells completed within HSU-4 showing estimated hydraulic capture areas, LLNL and vicinity, April 2009.

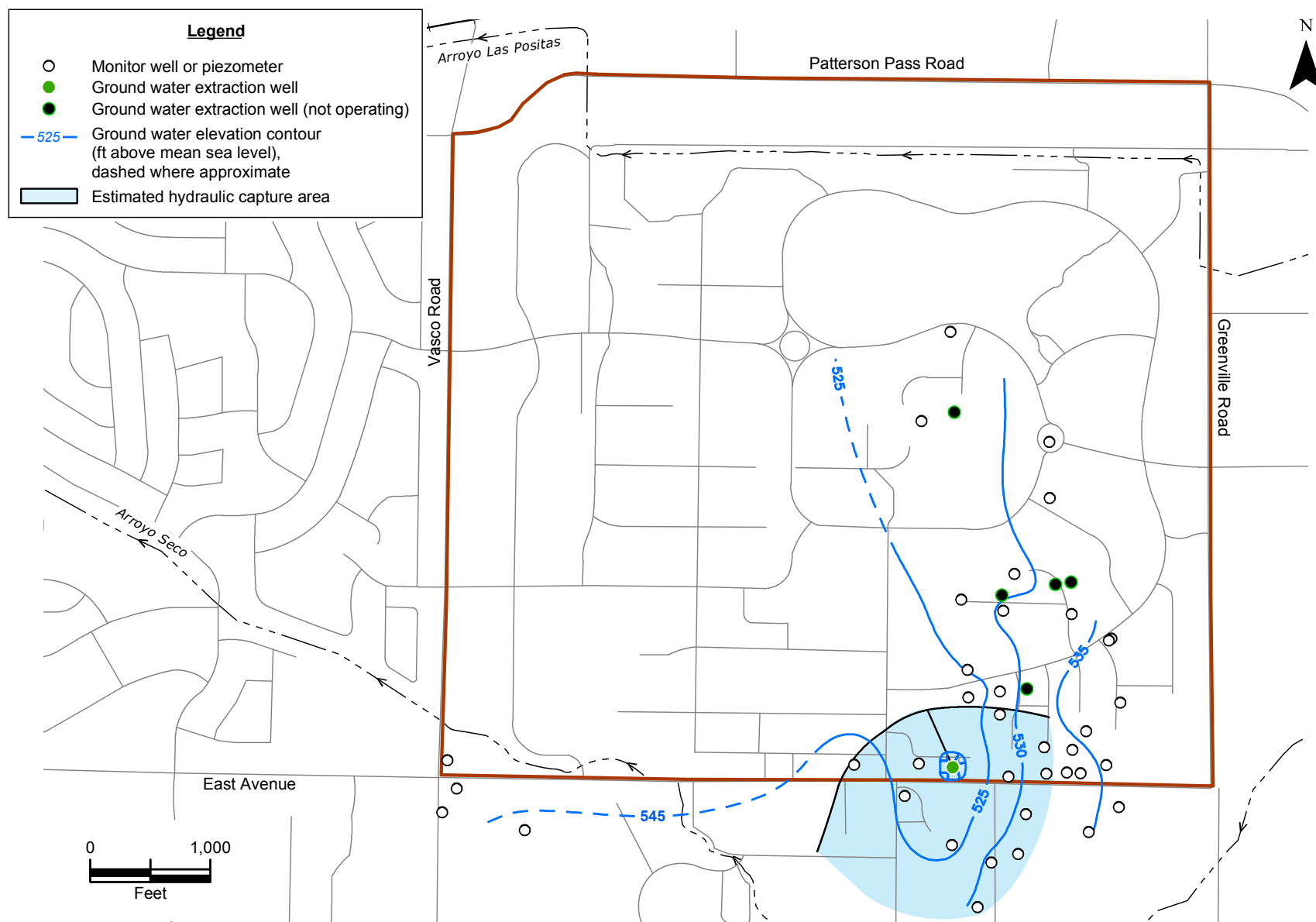


Figure 7. Ground water elevation contour map based on 44 wells completed within HSU-5 showing estimated hydraulic capture areas, LLNL and vicinity, April 2009.